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**UNITED STATES DISTRICT COURT**  
**NORTHERN DISTRICT OF CALIFORNIA**  
**SAN JOSE DIVISION**

In re GOOGLE DIGITAL PUBLISHER  
ANTITRUST LITIGATION

Case No. 5:20-cv-08984-BLF

**CONSOLIDATED CLASS ACTION  
COMPLAINT**

**DEMAND FOR JURY TRIAL**

Judge: Hon. Beth Labson Freeman  
Courtroom: 3, 5th Floor, San Jose

1 Plaintiffs Genius Media Group, Inc., Sterling International Consulting Group,  
 2 Sweepstakes Today LLC, The Nation Company, L.P., The Progressive, Inc., JLaSalle Enterprises  
 3 LLC, and Mikula Web Solutions, Inc. (“Plaintiffs”), on behalf of themselves and all others  
 4 similarly situated, bring this class action, pursuant to Rule 23 of the Federal Rules of Civil  
 5 Procedure, against Defendants Alphabet Inc. (“Alphabet”), Google LLC (“Google”), and  
 6 YouTube, LLC (“YouTube”) (collectively, “Defendants”). Plaintiffs seek treble damages and  
 7 injunctive relief for Defendants’ violations of Section 2 of the Sherman Act, 15 U.S.C. § 2, and  
 8 allege, based on personal knowledge as to acts and events taking place in their presence, on the  
 9 investigation of counsel, and on information and belief for all other allegations, as follows:

### 10 **INTRODUCTION**

11 1. This case is about the future of online publishers such as Plaintiffs and proposed  
 12 Class members who produce and publish the websites that have become the driving source of  
 13 information throughout our society. These publishers, ranging from news organizations, to niche  
 14 informational sites, to eclectic work-at-home bloggers, rely on online advertising revenue to fund  
 15 their businesses. Their ability and incentive to create online content is being unlawfully  
 16 threatened by Google—a titan of the internet—whose advertising-related revenues have  
 17 exploded, over \$145 billion in 2020, while publisher ad revenues have plummeted.

18 2. The online advertising market is broken because of Google’s past and ongoing  
 19 unlawful conduct directed at online publishers. Plaintiffs bring this action to protect free market  
 20 competition from Google’s continued unlawful manipulation, and to remedy harm to online  
 21 publishers that sell digital advertising space to advertisers. That harm is the direct result of  
 22 Google’s efforts to expand and maintain its dominance and control of publisher-provided online  
 23 advertising.

24 3. While most-commonly known as a search engine, Google (including its parent  
 25 Alphabet Inc.) is a digital advertising behemoth, and the digital advertising services that Google  
 26 sells to publishers and advertisers generate a substantial portion of Google’s revenue. As  
 27 discussed below, Google has illegally exploited its unique opportunities for competitive  
 28 interference—derived from its control over the tools that connect publishers and advertisers—to

1 benefit its own business and to harm publishers.

2           4.       The unlawful anticompetitive conduct at the heart of this case occurs in the display  
3 advertising marketplace, where publishers sell space on their websites to advertisers through real-  
4 time auctions. Through its campaign of anticompetitive conduct, Google has achieved and  
5 maintained market and monopoly power in that marketplace by erecting a toll bridge between  
6 publishers and advertisers, effectively mandating passage across that bridge for publishers  
7 seeking access to advertisers, and extracting supracompetitive tolls.

8           5.       Plaintiffs and the proposed Classes are publishers who operate websites and seek  
9 to sell space on their own websites to advertisers for the placement of digital display ads. When  
10 the viewer or user of a webpage loads and views the page, she provides the publisher with the  
11 opportunity to populate that page with advertising targeted specifically to her, effectively  
12 generating ad inventory on the publisher's site (known as "impressions"). This sets off a series  
13 of processes that place digital ads on publishers' websites through what is called the "Ad Tech  
14 Stack." At the top of that stack is the publisher Ad Server—the software or code that publishers  
15 use to evaluate advertising content—which connects the publisher to "Ad Exchanges" and/or "Ad  
16 Networks." Ad Exchanges are auction-like platforms where advertisers bid to place  
17 advertisements on publishers' websites. Ad Networks are platforms that match advertisers and  
18 publishers, but which provide fewer features and target relatively smaller publishers than Ad  
19 Exchanges. Ad Exchanges and Ad Networks provide bids from their participating advertisers to  
20 the publisher Ad Server. Once a publisher's Ad Server identifies the winning bid, it selects the  
21 winning advertisement from the advertiser's representatives in the Ad Tech Stack and places the  
22 ad on the publisher's website.

23           6.       Google controls the publisher side of the Ad Tech Stack from top to bottom.  
24 Google controls the primary tools and products used by publishers, including (1) the dominant  
25 publisher Ad Server products (70-90% of the market), (2) the dominant Ad Exchange (more than  
26 50% of the market), and (3) the dominant Ad Network (more than 50% of the market). Google  
27 also controls the dominant tools used by advertisers to bid on ad inventory (advertiser buying  
28 tools) (70-90% of the market).

1           7. Google uses its dominance across these markets to prevent competition, charge  
2 supracompetitive prices, and stifle innovation. Google performs every function in the digital  
3 advertising chain that connects publishers and advertisers, and Google controls access to the  
4 majority of advertising volume. When publishers have tried to avoid Google's dominance,  
5 Google has promptly used its monopoly power to stamp out those efforts and prevent competition.

6           8. Google has been able to maintain its dominance through exclusionary conduct  
7 because it is in the position of representing both sellers of display ad space (publishers like  
8 Plaintiffs and the proposed Classes) and those they sell to (advertisers), while also controlling the  
9 platforms through which both sides interact (the Ad Exchange or Ad Network that sets the auction  
10 and pricing rules). As a result, Google has the incentive and ability to bias ad auction rules and  
11 prices in its own favor, which it has done for many years. Google has unlawfully distorted the  
12 amounts ultimately received by the publishers (and the amount paid by advertisers), keeping a  
13 supracompetitive portion or "take" for itself as the all-important middleman.

14           9. Google has the ability to accomplish this distortion because of its dominant  
15 publisher Ad Server—the software or code that publishers use to make critical decisions about  
16 what advertisements will be displayed on their websites—to impose anticompetitive rules and  
17 conduct that artificially warps the channels through which publishers sell their ad inventory, and  
18 disadvantages rival Ad Exchanges and Ad Networks.

19           10. Publishers maximize revenue by offering their inventories to as many advertisers  
20 as possible; hence, publishers would prefer to deal with multiple Ad Exchanges. The Ad Server  
21 selects the winning bid from among the competing Ad Exchanges and Ad Networks. Generally  
22 speaking, and in the absence of Google's anticompetitive conduct, publisher Ad Servers would  
23 evaluate the bids from multiple channels simultaneously, accepting all bids from all Exchanges  
24 that exceeded the publisher's minimum threshold. But Google has rigged the selection process  
25 by programming its market dominant Ad Server so that the winning bid from Google's Ad  
26 Exchange is more likely to succeed because Google affords that bid both first-in-line privilege  
27 and a "last look," giving Google's Ad Exchange the final opportunity to secure the impression by  
28 paying incrementally more than any rival Exchange. This combination of first and last looks, has

1 enabled by Google's monopoly control over publisher ad serving, artificially and anti-  
2 competitively distorted the Ad Server's bid selection process with the intent to exclude rival Ad  
3 Exchanges as a means to maintain and expand Google's dominance in the Ad Exchange market.

4 11. The result of Google's conduct throughout the Ad Tech Stack has been a vicious  
5 cycle that has increasingly impaired competition and benefited only Google. As Google's  
6 publisher Ad Server stacked the deck in favor of Google's Ad Exchange, it drove more advertisers  
7 to place bids through Google's Ad Exchange, because bids placed on that Exchange were more  
8 likely to win than the same bid placed on a non-Google Exchange. This exclusionary conduct, in  
9 turn, drew publishers to prefer Google's Ad Exchange because it provided access to more bidders.  
10 And because Google restricted access to its Ad Network and Ad Exchange products to publishers  
11 using Google's Ad Server, publishers were compelled to use the Google Ad Server even though  
12 its business rules enhanced Google's dominance and further impaired competition by favoring  
13 Google's products. This cycle of exclusionary conduct obtained, enhanced, maintained, and  
14 reinforced Google's market and monopoly power in the publisher Ad Server, Ad Network, and  
15 Ad Exchange markets.

16 12. Attempting to avoid being totally at Google's mercy, and seeking to preserve at  
17 least some level of competition, publishers and other market participants implemented "header  
18 bidding"—a process that enabled *simultaneous* bidding among competing Ad Exchanges—as a  
19 more competitive means of selling their advertising inventory. Header bidding effectively  
20 allowed publishers to secure higher bids from rival, non-Google Ad Exchanges, thereby  
21 circumventing the sequential bidding process that Google had rigged in its favor.

22 13. Google reacted to the market-driven threat to its dominance by undertaking  
23 another round of anticompetitive actions to use its monopoly power to ensure that it would retain  
24 and expand its control over the Ad Exchange market. Google did this by imposing Ad Server  
25 rules that pushed publishers to Google's own services and impeded the ability of header bidding  
26 to enhance competition on the merits or function as intended. For example, Google used its  
27 market power to slow down header bidding, while ensuring that Google had special opportunities  
28 to take ad placement that otherwise would have been made through header bidding. Google also

1 started levying an explicit surcharge on the bids submitted by non-Google Ad Exchanges. The  
2 surcharge can run as much as 10 to 15 percent of a bid, and it takes the form of a deduction from  
3 non-Google Ad Exchange bids as they are entered into the bidding process. Because of this  
4 structure, the surcharge on bids from rival Ad Exchanges not only is an added cost to rivals but  
5 also enables Google's Ad Exchange to win auctions even when its advertiser is not the highest  
6 bidder, to the clear detriment of publishers.

7 14. Google even went beyond surcharging to maintain its market power by imposing  
8 uniform bidding floors that artificially prevent publishers from maximizing their revenues  
9 through competition. Google imposed these floors by modifying its publisher Ad Server product  
10 to preclude publishers from establishing differentiated minimum bid floors for Ad Exchanges as  
11 a way of encouraging more advertisers to utilize those rivals. When publishers tried to encourage  
12 more competition for the advertising space sold on their websites—*e.g.*, by allowing advertisers  
13 to submit lower bids through rival Ad Exchanges—Google programmed its publisher Ad Server  
14 to prevent it. By prohibiting bid discounting, the very essence of bid competition, Google has  
15 erected yet another anti-competitive and artificial barrier to rival Ad Exchanges, preventing  
16 publishers from pursuing revenue-maximizing strategies in the process.

17 15. Google has further tilted the Ad Exchange market in its favor by combining its  
18 publisher Ad Server and Ad Exchange products as a single product: Google Ad Manager. This  
19 fusion of two distinct products serving distinct roles in related but distinct markets is an unlawful  
20 tying arrangement. Publishers needing access to bids from Google's pool of advertisers through  
21 Google's Ad Exchange are also forced to use Google's Ad Server, while in turn, publishers using  
22 Google's Ad Server are locked into using Google's Ad Exchange. This conduct favors Google's  
23 Ad Exchange by creating vendor lock-in to a single, anticompetitive, Google-controlled  
24 marketplace, entrenching Google's monopoly power in the publisher Ad Server market and  
25 excluding rival Ad Exchanges and Ad Networks.

26 16. Google also directed anticompetitive conduct against the small- and medium-sized  
27 publishers that use Ad Networks, which act as intermediaries helping match those smaller  
28 publishers with advertisers. Google ties the use of its Ad Network, the Google Display Network,



1 to its Ad Server offerings (AdSense and Ad Manager). Publishers, particularly the smaller  
2 publishers that rely on Ad Networks because their web traffic volume does not qualify them for  
3 Ad Exchanges, require access to Google's pool of advertisers through Google's Ad Network to  
4 sell their ad inventory. By tying its Ad Network services for publishers to its Ad Servers, Google  
5 coerces publishers to use its Ad Server products. Further, Google's dominance in the Ad Network  
6 and tied Ad Server offerings enables Google to extract an artificially high take rate from  
7 publishers that use Ad Networks to sell their inventory.

8 17. In addition to the anticompetitive restraints listed above, Google has illegally used  
9 its monopoly and market power in additional ways to maintain its dominance in the Ad Server,  
10 Ad Network, and Ad Exchange markets, as well as to gain further dominance in related markets  
11 and further stamp out competition. Substantial barriers to entry further assist in consolidating  
12 Google's market power and online dominance throughout the Ad Tech Stack.

13 18. Google's conduct is not competition on the merits, but instead deliberately crafted  
14 anticompetitive conduct designed to maintain and enhance its market and monopoly power in the  
15 Ad Exchange and Ad Network markets or, alternatively, attempts to monopolize the Ad Exchange  
16 and Ad Network markets. Individually and collectively, these unlawful acts deter innovation,  
17 exclude competition, and rob customers of quality products and their right to choose among  
18 competing alternatives.

19 19. Google's unrivaled dominance in all of the relevant markets and Google's illegal  
20 conduct, as alleged herein, has been setting off alarm bells worldwide for many years. In October  
21 2020, following a year-long investigation, the United States Department of Justice filed a civil  
22 antitrust lawsuit to stop Google from unlawfully maintaining monopolies in the search and search  
23 advertising markets and to remedy the competitive harms. In December 2020, a number of state  
24 attorneys general filed suit in Texas to remedy Google's unlawful conduct with respect to display  
25 advertising, challenging several of the practices at issue in this litigation. These ongoing  
26 governmental investigations in the U.S. follow multiple antitrust inquiries worldwide, as well as  
27 antitrust-related penalties levied on Google by the European Commission, France, India, and  
28 Russia.



20. The practices challenged herein harm publishers, advertisers, and innovative companies that have created—or, in a competitive market could create—alternative advertising services and platforms. In the end, consumers lose: Publishers realizing lower advertising revenues produce less output, and have fewer resources available for investment in innovation and other means of providing better products and information to consumers.

21. Plaintiffs thus bring this class action, alleging violations of Section 2 of the Sherman Act and of California's competition laws, arising out of Google's anticompetitive conduct aimed at publishers. Plaintiffs seek relief for themselves and the proposed Classes to ensure that competition, not Google's anticompetitive rules and practices, governs the sale of online display advertising space on their websites through the publisher Ad Server, Ad Exchange, and Ad Network markets. Left unrestrained, Google will continue to act to maintain and enhance its market and monopoly power throughout the Ad Tech Stack, allowing Google's excessive toll on publishers to continue unabated. If Google is allowed to maintain that control, there is no end to Google's ability to charge publishers monopoly prices, suppress the revenues that publishers can get from selling display ad space on their websites, and thereby reduce the output and quality of content on the web. Further, left unabated, Google will continue to have the power to decide which publishers live and which die. Such an outcome cannot be permitted under federal and state antitrust laws.

### **PARTIES**

22. Plaintiff Genius Media Group, Inc. is a Delaware corporation with its principal place of business at 92 Third Street, Brooklyn, New York 11231. Established in 2009, Genius is a digital media company offering services such as the development and maintenance of a vast repository of annotated music lyrics, some of which are artist-supplied and many of which are transcribed and refined by a community of over two million Genius contributors. Genius has approximately 25-million advertising impressions per day and has earned tens of millions of dollars in annual advertising revenue over the last four years. Genius Media has used Google's publisher Ad Server and Ad Exchange products to sell the advertising space on its website. Genius Media thus paid Google for Google's Ad Server and Ad Exchange products. As a direct

1 result of Google's misconduct as alleged herein, during the Class Period, Genius Media paid  
2 artificially inflated fees directly to Google and also received reduced advertising revenues as a  
3 result of Google's misconduct and suffered economic damage and antitrust injury as a direct  
4 result.

5         23. Plaintiff Sterling International Consulting Group is a Delaware Corporation with  
6 its principal place of business in Statesville, NC. Sterling operates an ad-supported website that  
7 uses Google's AdSense, a publisher Ad Server, to identify the creation of ad inventory, obtain  
8 bids from the Google Display Network (Google's Ad Network), and fill the ad space on its  
9 website. Sterling thus paid Google to use Google's Ad Server and Ad Network products. As a  
10 direct result of Google's misconduct as alleged herein, during the Class Period, Sterling paid  
11 artificially inflated fees directly to Google and also received reduced advertising revenues as a  
12 result of Google's misconduct, and suffered economic damage and antitrust injury as a direct  
13 result.

14         24. Plaintiff Sweepstakes Today LLC Plaintiff Sweepstakes Today, LLC is a limited  
15 liability corporation organized and existing under the laws of the State of Oklahoma, with its  
16 principal place of business located at 2914 South 122nd East Avenue, Tulsa, Oklahoma 74129.  
17 Since 2004, Sweepstakes Today has operated a website, Sweepstakestoday.com, that provides  
18 online access to sweepstakes, contests, promotions, and drawings offered by large, well-known  
19 companies and corporations. Sweepstakes Today is an online publisher. On its sweepstakes  
20 website, it integrates and shows digital advertisements and generates revenue by displaying these  
21 ads, including ads selected, placed and served or filled through Google's advertising and  
22 publishing products and applications. As a direct result of Google's misconduct as alleged herein,  
23 during the Class Period, Sweepstakes Today paid artificially inflated fees directly to Google, and  
24 also received reduced advertising revenues as a result of Google's misconduct, and suffered  
25 economic damage and antitrust injury as a direct result.

26         25. Plaintiff The Nation Company, LLC, is a limited liability corporation organized in  
27 the state of New York, and having its principal place of business at 520 8<sup>th</sup> Avenue, 21<sup>st</sup> Floor,  
28 New York, New York 10018. The Nation used a Google publisher Ad Server product and used

1 and paid for, through a fee deduction from Google, a Google Ad Network product to sell space  
2 on its website to advertisers during the Class Period, received reduced net revenues as a  
3 consequence of Google's misconduct, and suffered economic damage and antitrust injury as a  
4 direct result. As a direct result of Google's misconduct as alleged herein, during the Class Period,  
5 The Nation Company paid artificially inflated fees directly to Google, and also received reduced  
6 advertising revenues as a result of Google's misconduct, and suffered economic damage and  
7 antitrust injury as a direct result.

8         26. Plaintiff The Progressive, Inc. is a non-profit organization organized in the state  
9 of Wisconsin, and having its principal place of business at 30 W. Mifflin Street, Suite 703,  
10 Madison, WI 53703. The Progressive used a Google Ad Server product and used and paid for,  
11 through a fee deduction by Google, a Google Ad Network product to sell space to advertisers on  
12 its website during the Class Period, received reduced net revenues as a consequence of Google's  
13 misconduct, and suffered economic damage and antitrust injury as a direct result. As a direct  
14 result of Google's misconduct as alleged herein, during the Class Period, The Progressive paid  
15 artificially inflated fees directly to Google, and also received reduced advertising revenues as a  
16 result of Google's misconduct, and suffered economic damage and antitrust injury as a direct  
17 result.

18         27. Plaintiff JLaSalle Enterprises LLC is a New York limited liability company with  
19 its principal place of business in Bellmore, New York. JLaSalle operates an ad-supported website  
20 that uses Google's AdSense, a publisher Ad Server, to identify the creation of ad inventory, obtain  
21 bids from the Google Display Network (Google's Ad Network), and fill the ad space on its  
22 website. JLaSalle thus paid Google to use Google's Ad Server and Ad Network products. As a  
23 direct result of Google's misconduct as alleged herein, during the Class Period, JLaSalle paid  
24 artificially inflated fees directly to Google and also received reduced advertising revenues as a  
25 result of Google's misconduct, and suffered economic damage and antitrust injury as a direct  
26 result.

27         28. Plaintiff Mikula Web Solutions, Inc. is a small business incorporated in  
28 Pennsylvania, and having its principal place of business at 22 Charter Oak Court, Doylestown,

PA 18901. Mikula Web Solutions operates one or more ad-supported websites that use Google's AdSense, a publisher Ad Server, to identify the creation of ad inventory, obtain bids from the Google Display Network (Google's Ad Network), and fill the ad space. Mikula Web Solutions thus paid Google to use Google's Ad Server and Ad Network products. As a direct result of Google's misconduct as alleged herein, Mikula Web Solutions paid artificially inflated fees directly to Google and also received reduced advertising revenues as a result of Google's misconduct, and suffered economic damage and antitrust injury as a direct result.

29. Defendant Google LLC is a Delaware limited liability company with its principal place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043. Defendant Google is a wholly owned and controlled subsidiary of XXVI Holding Inc., which is a subsidiary of Defendant Alphabet. Since 2006, Google has wholly owned and controlled YouTube. Google is the alter ego and agent of Defendants Alphabet and YouTube, and the companies regularly combine and comingle their operations. For example, Google and YouTube share user data from their respective websites, google.com and youtube.com, in order to create new content and personalized advertisements on both sites.

30. Defendant Alphabet Inc. is a Delaware corporation with its principal place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043. Defendant Alphabet wholly owns and controls Defendants Google and YouTube. Defendant Alphabet is the alter ego of Defendants Google and YouTube. Google and YouTube direct all profit to, and report revenue through, Alphabet. Defendant Alphabet is one of the top ten largest companies in the United States with more than \$162 billion in annual revenue. Alphabet, ranking 15th in the list of Fortune 500 companies, is traded on the NASDAQ under the symbol "GOOGL" and is included in the S&P 100 Index.

31. Defendant YouTube, LLC, is a Delaware limited liability company with its principal place of business at 901 Cherry Avenue, San Bruno, California 94066. YouTube is a wholly owned and controlled subsidiary of Defendant Google. Defendant YouTube is the alter ego of Defendants Google and Alphabet. Google and YouTube combine products for purposes of Google's AdWords advertising program, which allows an advertiser to determine that if a

1 person searches for a specific term on Google’s search engine (e.g., “financial advisor”), the  
 2 advertiser can direct that the next time that user watches a video on YouTube that person will see  
 3 an advertisement for financial advisory services. Google has recently begun testing integrating  
 4 links to its search engine within YouTube’s search results. According to YouTube’s Terms of  
 5 Service: “The entity providing the Service is Google LLC, a company operating under the laws  
 6 of Delaware, located at 1600 Amphitheatre Parkway, Mountain View, CA 94043 (referred to as  
 7 ‘YouTube’, ‘we’, ‘us’, or ‘our’). References to YouTube’s ‘Affiliates’ in these terms means the  
 8 other companies within the Alphabet Inc. corporate group (now or in the future).”

9 32. Collectively, Defendants are operated and controlled as a single entity, with  
 10 Sundar Pichai acting as the CEO. Not only did Google essentially create Alphabet as a holding  
 11 company in 2015, but virtually all of Alphabet’s revenues come from Google. YouTube, in turn,  
 12 is a wholly owned subsidiary of Google and is controlled and operated as such. Alphabet filed  
 13 its 10-K and 10Q statements with the Securities and Exchange Commission, reporting  
 14 consolidated revenues for all of the defendants. In fact, these statements expressly define  
 15 Alphabet as “Alphabet Inc. and its subsidiaries.” *See, e.g.,* Alphabet Inc., Quarterly Report (Form  
 16 10-Q) (July 30, 2020), at 2.

17 33. All three Defendants engage in interstate commerce and in activities substantially  
 18 affecting interstate commerce including, without limitation, providing ad tech services to  
 19 publishers based throughout the United States and globally. Publishers, both foreign and  
 20 domestic, use Google’s ad tech services to sell space on their websites to advertisers to display  
 21 digital ads, which are targeted at users across the United States. Each Defendant deals with and  
 22 earns revenue from publishers throughout the United States.

### 23 **JURISDICTION AND VENUE**

24 34. This action arises under Sections 2 and 15 of the Sherman Act, 15 U.S.C. §§ 2, 15  
 25 and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 & 26.

26 35. This Court has subject matter jurisdiction over Sherman Act claims pursuant to  
 27 28 U.S.C. §§ 1331 & 1337 and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 & 26.

28 36. This Court has personal jurisdiction over Defendants. Google, Alphabet, and

1 YouTube each maintain their headquarters in California.

2 37. Venue is proper in this District pursuant to Sections 4, 12, and 16 of the Clayton  
3 Antitrust Act, 15 U.S.C. §§ 15, 22, and 26, and 28 U.S.C. § 1391(b), (c), and (d). All Defendants  
4 reside, transact business, are found, and have agents in this District.

5 38. Defendants' acts were within the flow of, were intended to have, and did, in fact,  
6 have a substantial effect on the interstate commerce of the United States.

7 **FACTUAL ALLEGATIONS**

8 **I. DIGITAL ADVERTISING**

9 39. The Internet reaches billions of people around the world and serves as a virtual  
10 marketplace for products, information, and ideas. Given the number of online visitors, this is an  
11 attractive forum for advertisers. Growing revenues derived from the sales of online or digital  
12 advertising space have driven the explosion of information available on the web since the first  
13 banner ad was displayed in 1993. Digital advertising is now the most rapidly growing segment  
14 of the advertising business in the United States, accounting for more than half of all advertising  
15 spending.

16 40. Before the internet, companies wanting to advertise did so largely through print,  
17 radio, and television. Advertising then was sent to all consumers, regardless of their traits or  
18 interests. The internet has changed all that, through advertising that is increasingly finely targeted  
19 to specific consumers who are more likely both to click on the ads and to ultimately buy the  
20 advertised products or services.

21 41. Online or digital advertising consists of marketing advertisements, which are  
22 delivered through the Internet on both desktop and mobile devices. Online advertising involves  
23 the use of the Internet as a medium to obtain website traffic and target and deliver marketing  
24 messages to the right users, customers, and consumers. In most cases, the decision of which ad  
25 is served/shown to the user is made in real time, in response to the search term entered by the user  
26 (in the case of search advertising) or in response to information about likely characteristics of the  
27 person viewing the advertisement (in the case of display advertising) or the context of the page  
28 being viewed.

1           42. Digital advertising takes several forms. For example, advertisements can be  
2 targeted to consumers, *inter alia*, as text-based ads to appear with search engine query results  
3 (“search advertising”), as display ads appearing in-line in publishers’ content such as blog posts  
4 or news articles (“display advertising”), or as ads in social media feeds.

5           **A. Search Advertising**

6           43. Search advertising comprises ads linked to a word or phrase (*e.g.*,  
7 “Goldendoodles” or “water sprinklers”) that are triggered to display when a user types that word  
8 or phrase into a search engine.

9           44. Advertisers value paid search ads because such ads are served to a user only after  
10 the user has made a query correlated with products or services related to the ad. On Google’s  
11 search engine platform, search ads typically appear at the top of the first page of results from a  
12 keyword search. Google hosts search advertising on other platforms as well—notably Google  
13 Play, Google Maps, and third-party applications.

14           45. Google has been dominant in the online search advertising market for roughly 17  
15 years. Collectively, Google’s products account for approximately 73% of the search advertising  
16 market.

17           **B. Display Advertising**

18           46. Like search advertising, buying and selling display ads often involves real-time  
19 bidding. Online advertising campaigns are run through various pieces of advertising technology,  
20 or “ad tech.” One main piece is the “Ad Tech Stack,” which refers to the series of companies and  
21 technologies on the Internet that places digital advertisements in front of the right user at the right  
22 time to maximize the chance for the ad to influence the user to take some desired action. Today,  
23 the Ad Tech Stack facilitates the automated selling and buying of digital ad inventory on a large  
24 scale in real time, as described in more detail below.

25           47. Unlike search advertising, which is triggered when a user expresses an interest in  
26 the product through a search inquiry, display advertising is designed to induce that interest by  
27 displaying ads on web pages likely to be frequented by potential customers. Since display ads  
28 are shown to specific users as they view a web page on their computer or mobile device, it is



critical for the successful deployment of marketing spend for advertisers to have information about each prospect.

### C. The Interplay of Search and Display Advertising

48. Advertisers purchase one format or another to serve their different goals. For instance, advertisers may purchase search ads to reach consumers actively looking to make a purchase by searching for a particular product or company. By contrast, advertisers may purchase display ads on a publisher's site to increase brand awareness or to market a product to a consumer that put the product in her shopping cart but did not complete the purchase.

49. Publishers, which operate websites and mobile applications, are necessarily restricted in the types of ad formats they can sell. A news website, for example, can generally sell display ads alongside its news articles but cannot generally sell search ads to monetize the same content.

## II. HOW DIGITAL DISPLAY ADVERTISING WORKS

50. Publishers sell their ad inventory to advertisers either directly through their marketing departments or indirectly through programmatic ad auctions. Approximately two-thirds of all online advertising dollars are spent via programmatic marketing.

51. The act of displaying an advertisement to a user on a webpage is known as an "impression." The value of an impression depends upon both the characteristics of the user who is viewing the ad and the value of the real estate where it is embedded—that is, the content of the publisher's webpage and the ad's location on that page. Thus, the value of a publisher's impression may be increased whenever an advertiser has additional information about the user. The publishers who can deliver the most desirable impressions in terms of quality of both the webpage and data on the user are able to charge more for space on their websites for advertisements.

52. Digital display advertising may be sold on the basis of impressions, clicks, or other actions. Cost per impression means that advertisers pay the publisher for the number of times their ads are displayed as different users load the relevant webpage. Cost per click means that the advertiser pays the publishers each time users click on the ads. Cost per action means the

1 advertiser pays the publisher if an action, such as a product purchase or a registration for a service,  
2 results from a user's exposure to the advertising.

3       53. Some large publishers with significant staffing and strong demand for their  
4 inventory are able to sell a limited number of advertisements directly to advertisers (so-called  
5 "direct-sold" ads). However, even those publishers that sell space directly to advertisers cannot  
6 always accurately predict how many spaces will be available for direct-sold ads because the  
7 amount of inventory is dependent on the number of users who visit the publisher's website (as  
8 well as other factors specific to the publishers' deals with advertisers, *e.g.*, specific criteria for  
9 users who would be targeted with the ads). Thus, selling inventory through programmatic or  
10 automated ad auctions permits publishers to sell their "remnant inventory" that either does not  
11 qualify for their direct-sold deals or where the programmatic placement would fetch a higher price  
12 than the direct-sold ad deals. Additionally, some publishers sell the entirety of their inventories  
13 through programmatic ad auctions. In sum, programmatic or automated ads are a critically  
14 important source of advertising revenue for publishers.

15       54. Advertisers that want to display their ads and publishers wishing to sell space on  
16 their websites for the ads each have a familiar problem: finding each other. As part of that process,  
17 publishers need—in the blink of an eye—to determine what space on their websites is available  
18 for advertisement and how much they want to charge, and then communicate that information to  
19 advertisers—and ultimately decide which ads they are willing to host on their site. Publisher Ad  
20 Servers, Ad Exchanges, and Ad Networks enable publishers to accomplish these goals, most often  
21 through automation. This process—in which a user loads a webpage, the auction occurs for any  
22 space for advertisement on that webpage, and the ad gets placed—is automatic (usually taking a  
23 few hundred milliseconds).

24       55. There are multiple ways for Ad Server, Ad Exchange, and Ad Network vendors to  
25 extract value from each transaction. For instance, Google may take a percentage of the fee that  
26 the advertiser pays, passing on a smaller share to the publisher. Google also uses surcharges,  
27 added fees, and imposes periodic "flat" or "tiered" fees (such as several hundred thousand dollars  
28 per year) in various circumstances through its Ad Server, Ad Exchange, and Ad Network

1 products.

2       56. The funds flow in the ad tech marketplace is opaque, with individual publishers  
3 and advertisers having only limited knowledge concerning the amount charged by a string of  
4 intermediaries. In the typical non-Google Ad Exchange transaction, an advertiser hires an ad  
5 agency, which charges a fee, to handle its ad placements. The ad agency utilizes an advertiser  
6 buying tool, which charges a fee, to source inventory and place bids. The advertiser buying tool  
7 places bids on an Ad Exchange, which charges a fee. When inventory is sold via auction on the  
8 Exchange, the Ad Exchange pays the Publisher. The Publisher knows the end amount it receives,  
9 and may or may not know the transactional fee charged by the Ad Exchange, but has no  
10 knowledge of the original amount paid by the advertiser, or the fees charged by other  
11 intermediaries.

12       57. When a publisher uses the Google Ad Server, it is paid by Google on every  
13 transaction that uses Exchange Bidding, discussed further below in the section starting at  
14 Paragraph 117. Thus, even when a rival Ad Exchange wins an impression through an Exchange  
15 Bidding auction, the rival exchange pays Google which then pays the Publisher. Similarly, when  
16 a publisher sells impressions through Google's Ad Network, it is once again Google which pays  
17 the publisher.

18       **A. The Relevant Participants in the Ad Tech Stack**

19       58. Publishers use software, called an Ad Server, to make their impressions available  
20 for sale. The publisher's Ad Server: (1) determines which ads to display on the publisher's  
21 website based on collected user data and preferences across publishers; (2) solicits and organizes  
22 bids from advertisers; (3) serves the ad to the user; and (4) collects and reports on additional data  
23 such as impressions and clicks, which is used to determine the cost to the advertiser and the  
24 amount of money paid to the publisher. Google's Ad Server is and has been for some time the  
25 dominant provider of publisher ad serving services.

26       59. Ad Exchanges are platforms enabling publisher Ad Servers to offer their inventory  
27 of impressions for sale, and advertisers to place bids on the impressions they wish to purchase.  
28 Ad Exchanges match advertisers and publishers programmatically using virtually instantaneous

1 auctions known as “real-time bidding.”

2 60. The Ad Exchange is the middleman that takes a cut of the price reached by the  
3 publisher and advertiser.

4 61. Smaller publishers with fewer page views and impressions than the Ad Exchange  
5 thresholds may use an Ad Network to sell their inventory of impressions. An Ad Network is an  
6 aggregator that collects ad inventory from multiple publishers and sells it to advertisers. Like Ad  
7 Exchanges, Ad Networks compete against one another on the basis of price for publisher  
8 inventory.

9 62. When possible, the publisher’s Ad Server will offer the same impression to  
10 multiple Ad Exchanges and Ad Networks in order to reach the broadest group of potential  
11 advertisers, thereby increasing publisher revenues. However, Google’s AdSense Ad Server,  
12 which ties the Ad Server and Ad Network products together, only offers the publisher’s ad  
13 impression to the Google Display Network (Google’s Ad Network).

14 63. Thus, the publisher’s view of the Ad Tech Stack looks like this:



18 *Figure 1: The Ad Tech Stack*

19 64. A key consideration for publishers in selecting a publisher Ad Server is what bids  
20 and what advertisers—and on what terms—the Ad Server can solicit from different sources.  
21 Publishers want their Ad Server to access the largest number of advertisers including those willing  
22 to submit the highest bids. Conversely, if a publisher Ad Server cannot access significant pools  
23 of advertisers, the publisher Ad Server cannot compete effectively in the market against Google’s  
24 publisher Ad Server. Because Google has such a large share of advertisers, and because Google  
25 restricts access to its advertising pool only to those using Google’s publisher Ad Server,  
26 publishers have no choice but to use Google’s publisher Ad Server. And once the publisher is  
27 locked in to Google’s Ad Server, Google ties its Ad Server with its Ad Network or Ad Exchange,  
28 thereby enhancing its monopoly power in both product markets. Moreover, once a publisher

1 chooses a publisher Ad Server and embeds that technology in its website, there are high costs to  
2 publishers of switching Ad Servers because they become integral parts of publishers' websites.

3 **B. How Online Display Ads Are Selected and Delivered**

4 65. Ads are chosen and shown to users via a sequence of events, all completed in a  
5 second or less. In order for an ad to be displayed to a user visiting a webpage, the publisher's Ad  
6 Server, the user's browser, or a combination of the two, reach out to Ad Exchanges and Ad  
7 Networks to request bids on the ad placement from interested advertisers. These requests often  
8 contain information about the content the user is accessing, the user who is intending to visit the  
9 publisher's website, and the size and prominence of the space available for advertisement on the  
10 web page. After the interested advertisers place their bids, each Ad Exchange selects the winning  
11 bid and transmits that bid to the publisher's Ad Server.

12 66. At that point, the publisher's Ad Server may request bids from multiple Ad  
13 Exchanges, putting them in direct price competition with one another in a sort of "auction of  
14 auctions." The Ad Server selects a winning bid from among the Ad Exchanges, and delivers the  
15 winning ad to the user's device. However, as alleged below, Google uses its dominance of the  
16 Ad Server market to manipulate the results of these auctions, thereby ensuring that Google wins  
17 even where the publisher could get a better price from another Ad Exchange and thereby  
18 suppressing the price that Google pays publishers for publisher ad space.

19 **C. Google Dominates All Levels of the Ad Tech Stack.**

20 67. Google has expanded its offerings throughout the Ad Tech Stack so that today it  
21 controls digital advertising from top to bottom. Google now controls virtually every part of the  
22 digital advertising chain.

23 68. Once Google seized control over the Ad Tech Stack, it also shrouded the entire  
24 process of buying and selling ads in secrecy. As a House Antitrust Report in 2020 recognized,

1 “this process lacks transparency.”<sup>1</sup>

2 69. Google withholds key information from publishers about its services, such as how  
3 much their space sold for and how much Google keeps, making it difficult for market participants  
4 to see the full extent of misconduct in Google’s auction processes.

5 70. Google’s dominance of the publisher Ad Server market began in 2007, when  
6 Google purchased DoubleClick, which then gave Google control of over 50% of the publisher Ad  
7 Server market. Since that purchase Google’s power has grown through the conduct alleged  
8 herein, to the point that Google achieved monopoly power in publisher Ad Servers, with an  
9 estimated market share of 70-90%.

10 71. Google has used its dominance in the publisher Ad Server market to become the  
11 dominant display Ad Exchange. Google’s Ad Exchange (or “AdX”) is Google’s auction-based  
12 system for premium websites to be paired with premium advertisers and has a market share of  
13 50% or more. The few rivals to Google’s Ad Exchange—such as Rubicon and OpenX—have  
14 market shares in the teens or single digits, and Google’s current market share outstrips the  
15 combined shares of the next six competitors. Google’s control over the publisher Ad Server  
16 makes it a gatekeeper for publishers’ revenues and puts Google in charge of publishers’ critical  
17 advertising and content decisions.

18 72. Google is also the dominant display Ad Network (the “Google Display Network”),  
19 with a market share of over 50%. Because Google controls such a dominant pool of advertisers,  
20 and its rivals have only fragmented shares, publishers must do business with Google in order to  
21 participate meaningfully in the relevant markets. Aware of that bind, Google only makes its Ad  
22 Network available to publishers who use its Ad Server by tying its Ad Server with its Ad Network.

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26 <sup>1</sup> *Investigation of Competition in Digital Markets, Majority Staff Report and Recommendations,*  
27 H. R. Subcomm. on Antitrust, Com. & Admin. L. of the Comm. on the Judiciary (2020)  
28 (hereinafter “House Antitrust Report”) at 129–30.

73. Today, Google stands as the dominant provider of tools to publishers at all levels of the Ad Tech Stack, with market power at each stage of that marketplace, with its market shares as shown below:

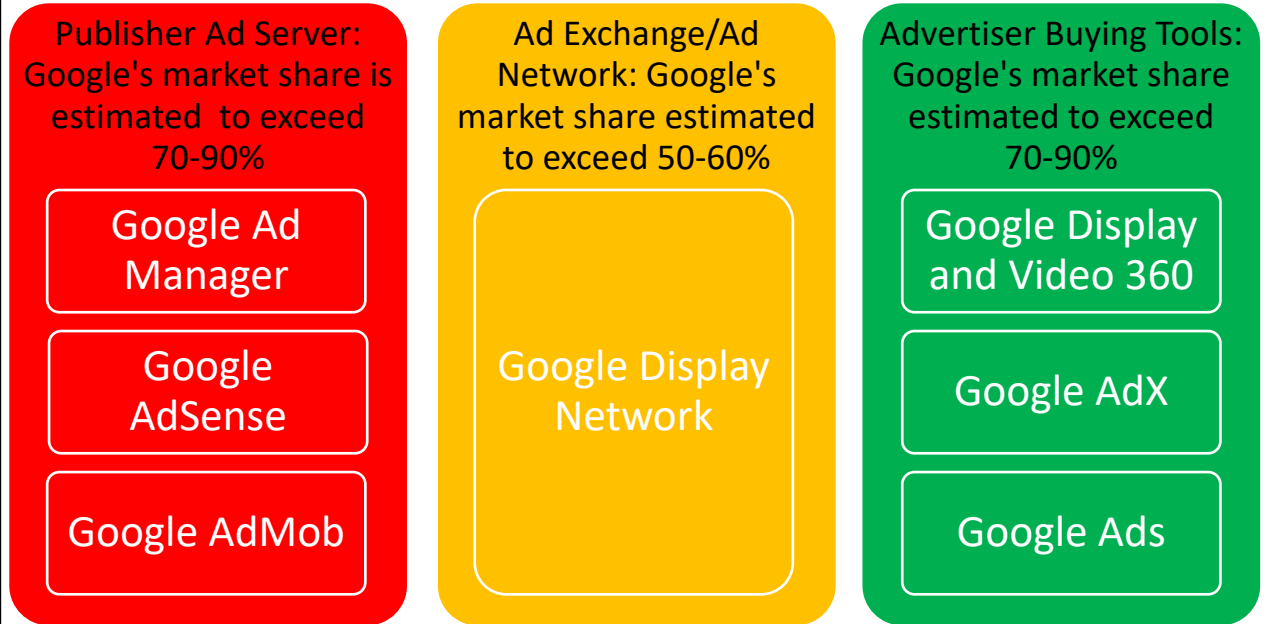


Figure 2: Google's Estimated Market Share at Each Level of the Ad Tech Stack

**D. Google's Significant Power on Both Sides of the Ad Exchange and Ad Network Markets is Compounded by Indirect Network Effects.**

74. Ad Exchanges and Ad Networks are subject to indirect network effects. This means that as the number of users on one side of the platform increases, because of Google's exclusionary conduct disadvantaging rival Ad Networks and Ad Exchanges, access to the platform becomes necessary to users on the other side of the platform.

75. Thus, as the number of advertisers using Google's Ad Exchange has grown, giving rise to more potential bidders on impressions, more publishers are pushed to use Google's Ad Exchange. Similarly, as the number of publishers offering impressions on Google's Ad Exchange has grown, increasing the inventory of impressions available on that Exchange, more advertisers are encouraged to use Google's Ad Exchange. Each additional advertiser increases the importance of Google's Ad Exchange to all publishers using it. Likewise, each additional publisher increases the importance of Google's Ad Exchange to all advertisers using it.



76. These same indirect network effects are present in the Ad Network market as well. As greater numbers of advertisers purchase through an Ad Network, the more publishers are pushed to use that Ad Network. Similarly, as the number of publishers selling inventory through an Ad Network increases (which increases the inventory of impressions), the more advertisers need to purchase inventory through that Ad Network (because it enhances their ability to reach audiences). The Google Display Network, Google's Ad Network, reaches more user impressions and websites than any other display network, including over two million small online publishers globally, providing Google with unparalleled scale among small publishers. Google also routes the bids of advertisers who use Google's advertiser buying tools (*e.g.*, Google Ads), comprising a substantial share of advertisers purchasing through Ad Networks, to the Google Display Network.

### **III. GOOGLE'S UNLAWFUL CONDUCT**

77. Google has market or monopoly power in each of the publisher Ad Server, Ad Exchange, and Ad Network markets.

78. As described below, Google has engaged in a series of actions to obtain, maintain and enhance monopoly power, or to attempt to obtain monopoly power in the publisher Ad Server, Ad Exchange, and Ad Network markets, including: (1) anticompetitive acquisitions at each level of the Ad Tech Stack, including in the publisher Ad Server market; (2) excluding rival Ad Exchanges through the imposition of rules designed to ensure Google's Ad Exchange wins more bids, thereby impairing the ability of rival Ad Exchanges to compete; (3) taxing rival Ad Exchanges through Google's Open Bidding process, which also impairs the ability of rivals to compete; (4) using its monopoly power in all three markets to exclude and impair rivals and raising barriers to entry by combining two separate products that serve distinct functions, the publisher Ad Server and Ad Exchange, which constitutes illegal tying of Google's Ad Servers to its Ad Network; (5) using its monopoly power in all three markets to exclude and impair rival Ad Networks from competing for impressions; and (6) using its publisher Ad Server to impose rate structures that raise rivals' costs.

79. Google has used this conduct to, maintain and enhance market dominance in the

1 publisher Ad Server, Ad Exchange, and Ad Network markets.

2 **A. Google Engaged in a Series of Acquisitions to Gain a Foothold at Each Level**  
3 **of the Ad Tech Stack.**

4 80. Google commenced its scheme to dominate the Ad Tech Stack with a series of  
5 acquisitions. Google has steadily and systematically grown through acquisition of corollary ad  
6 tech, web application, and online video platform companies. Since its founding in 1998, Google  
7 has acquired more than 227 companies, spending over \$27 billion for its top 10 acquisitions.  
8 Rather than growing organically, Google has grown through strategic acquisitions to yield  
9 products, manpower, and patent portfolios that directly and indirectly feed its online advertising  
10 business revenue.

11 81. The first and most significant such acquisition was Google's 2007 purchase of  
12 DoubleClick for \$3.1 billion. Google purchased DoubleClick as a means of entering the markets  
13 for providing services within the Ad Tech Stack. DoubleClick provided publisher Ad Server  
14 services and operated the largest Ad Exchange. The DoubleClick products formed the basis of  
15 Google's ad tech offerings in ensuing years. As Google's submission to the United States House  
16 of Representative's Subcommittee on Antitrust, Commercial, and Administrative Law  
17 acknowledged, prior to the DoubleClick acquisition, Google had "no meaningful presence" in the  
18 Ad Tech Stack. A July 2006 Google presentation suggested that, by acquiring DoubleClick,  
19 Google could obtain "self-reinforcing benefits" for Google's planned digital ad "ecosystem."

20 82. At the time of the Google's acquisition of DoubleClick, industry participants,  
21 including publishers, raised concerns that Google could use DoubleClick's market power in Ad  
22 Servers and its wealth of consumer tracking data to reduce competition throughout the online  
23 advertising marketplace. The Federal Trade Commission, which conducted a competition  
24 assessment of the merger, observed the potential for future "unlawful tying or other  
25 anticompetitive conduct." The FTC nevertheless permitted the merger to continue, over the  
26 prescient dissent of a Commissioner who warned of the "troubling" likely effect that the merger  
27 would have on "the evolution of the entire online advertising market—especially in light of  
28 existing network effects, and the tremendous additional network effects the transaction will

1 generate.” Another Commissioner, while concurring in the decision to close the investigation,  
 2 noted “serious vertical competition issues raised by Google’s proposed acquisition of  
 3 DoubleClick.”

4 83. Ultimately, the FTC approved the merger, concluding that display advertising  
 5 markets were “relatively nascent, dynamic and highly fragmented,” and the DoubleClick  
 6 acquisition did not threaten competition in the markets because other big companies appeared “to  
 7 be well positioned to compete vigorously against Google.”<sup>2</sup> However, as the New York Times  
 8 recently reported, at least one of the FTC commissioners who voted to approve the merger has  
 9 since expressed his regrets. Specifically, William Kovacic told the New York Times, “If I knew  
 10 in 2007 what I know now, I would have voted to challenge the DoubleClick acquisition.”<sup>3</sup>

11 84. Indeed, the DoubleClick acquisition was instrumental in cementing Google’s  
 12 stronghold in the lucrative online advertising industry. In addition to DoubleClick software,  
 13 Google also acquired relationships with web publishers, advertisers, and agencies, beating a host  
 14 of other potential buyers like Microsoft to the acquisition. DoubleClick has been enormously  
 15 successful for Google, with roughly 80% of Alphabet’s \$162 billion in revenues in 2019 coming  
 16 from its advertising business.

17 85. When Google purchased DoubleClick, it told Congress and the FTC that it would  
 18 not combine the data collected on Internet users via DoubleClick with the data collected  
 19 throughout Google’s ecosystem (e.g., through Gmail, Search, etc.). In 2016, however, Google  
 20 reversed this commitment, and subsequently combined DoubleClick data with personal  
 21 information collected through other Google services—effectively combining information from a  
 22

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23 <sup>2</sup> See Statement of Federal Trade Commission Concerning Google/DoubleClick, *available at*  
 24 [https://www.ftc.gov/system/files/documents/public\\_statements/418081/071220googledc-](https://www.ftc.gov/system/files/documents/public_statements/418081/071220googledc-commstmt.pdf)  
 25 [commstmt.pdf](https://www.ftc.gov/system/files/documents/public_statements/418081/071220googledc-commstmt.pdf).

26 <sup>3</sup> See *This Deal Helped Turn Google Into an Ad Powerhouse. Is That a Problem?*, The New  
 27 York Times (Sept. 21, 2020), *available at*  
 28 <https://www.nytimes.com/2020/09/21/technology/google-doubleclick-antitrust-ads.html>.

1 user's personal identity with his or her location on Google Maps, information from Gmail, and his or  
 2 her search history, along with information from numerous other Google products

3 86. Google followed its DoubleClick acquisition with additional ad tech properties,  
 4 including, but not limited to:

- 5 • In November 2009, Google acquired AdMob, a company with technology for  
 6 serving ads in mobile apps, for \$750 million. Google now uses AdMob  
 7 technology to offer publisher Ad Server services in mobile apps.
- 8 • In June 2011, Google acquired AdMeld, one of the largest supply-side  
 9 platforms, which Google integrated into its auction platforms.

10 87. These and other acquisitions created and/or solidified Google's product offerings  
 11 in the Ad Tech Stack.

12 **B. Google Impaired and Excluded Rival Ad Exchanges by Using Its Publisher**  
 13 **Ad Server to Manipulate Auction Processes to Preference Its Ad Exchange.**

14 88. In the publisher Ad Server market, Google wields overwhelming monopoly power  
 15 and has a share of up to 90% of the market. Google's control over this stage of the Ad Tech Stack  
 16 is particularly important because it is the publisher Ad Server that decides which advertisement  
 17 wins the right to be displayed on a publisher's webpage. From at least 2010 to the present, Google  
 18 has used this favored position to preference its own Ad Exchange, and to disadvantage, impair,  
 19 and exclude competing Ad Exchanges.

20 **1. The Waterfall System (Pre-2009)**

21 89. Prior to 2009, Google's display ad auctions allowed publishers to prioritize their  
 22 sources of demand for advertising (from deals sold directly by the publishers and from auctions  
 23 through one or more Ad Exchanges) within Google's publisher Ad Server using a "waterfall"  
 24 sequence.

25 90. Publishers could prioritize their ad sources based on how the publishers valued the  
 26 ad sources, with direct-sold deals (if any) typically having priority over auctioned ads. The typical  
 27 auctions used a "second-price" auctioning mechanism. Publishers would typically rank auction  
 28 sources based on estimated performance using historical yield data.

1           91.     Until recently, second-price auctions have been the norm in programmatic  
2 advertising. In a second-price auction, the winner only pays \$0.01 more than the second highest  
3 bid. If Advertiser A bids \$2.00 for an impression and Advertiser B bids \$1.75, the auction clearing  
4 winning bid will be \$1.76. Second-price auctions incentivize advertisers to bid in accordance  
5 with the value they place on the impression because they know that they will only have to pay the  
6 amount needed to beat the next highest bidder irrespective of their bid amount, eliminating what  
7 is known as buyers' "remorse." First-price auctions, on the other hand, create incentives for  
8 advertisers not to bid as high as they value the impression and instead focus on optimizing their  
9 bids to bid as low as possible but still win the auction.

10           92.     When ad inventory became available (*i.e.*, when a user loaded the publisher's page  
11 generating ad slots) and there was no direct deal ad eligible for placement, the Google publisher  
12 Ad Server selected the ad source in order of the publisher's assigned rankings, with the highest-  
13 ranked source having the opportunity to conduct an auction and present a winning bid for the ad  
14 slot above a reserve price.

15           93.     If that first auction sold the ad above the reserve, the auctioning process stopped  
16 there. If the reserve price was not met, Google's publisher Ad Server would offer the next Ad  
17 Exchange in the waterfall the opportunity to bid at a lower reserve price, and the process repeated  
18 for additional ad sources, lowering the reserve price each time.

19           94.     Although this process helped publishers reduce the risk that ad inventory would  
20 not sell, it precluded Ad Exchange ad sources, notably including Google's rivals, from bidding  
21 against each other in real time.

22           95.     The Waterfall System failed to maximize revenues to publishers because it did not  
23 allow publishers to rank ad sources in the Waterfall in accordance with the ad sources' actual bids  
24 (instead relying only on estimated bids based on historic auction results), nor did it allow all  
25 interested advertisers to bid against each other in real time.

26           96.     These limitations both reduced publisher advertising dollar yields. For example,  
27 if the publisher Ad Server's estimated bids for its second (or third, or fourth, or fifth, etc.) ad  
28 source were inaccurate and those advertisers would have valued the ad slots more (*i.e.*, bid higher

amounts) than the historic bid, publishers would lose out on the actual value placed on their inventory, and would receive lower revenues as a result.

97. Moreover, the sequential bid aspect of the Waterfall System prevented publishers from securing higher bids that had a lower rank in the Waterfall. As set forth in the figure below, if the Waterfall System had two ad sources (Ad Exchanges) both running second-price auctions, the publisher Ad Server would collect the bid from the first ad source using a reserve price (say \$5). The auction clearing price may then be \$5.01 and, because the reserve price was satisfied, the first auction would place the ad. However, if the second ad source's auction clearing price would have been \$6.01, the publisher effectively lost \$1 for the ad placement due to the Waterfall System because that second ad source never got the opportunity to bid.

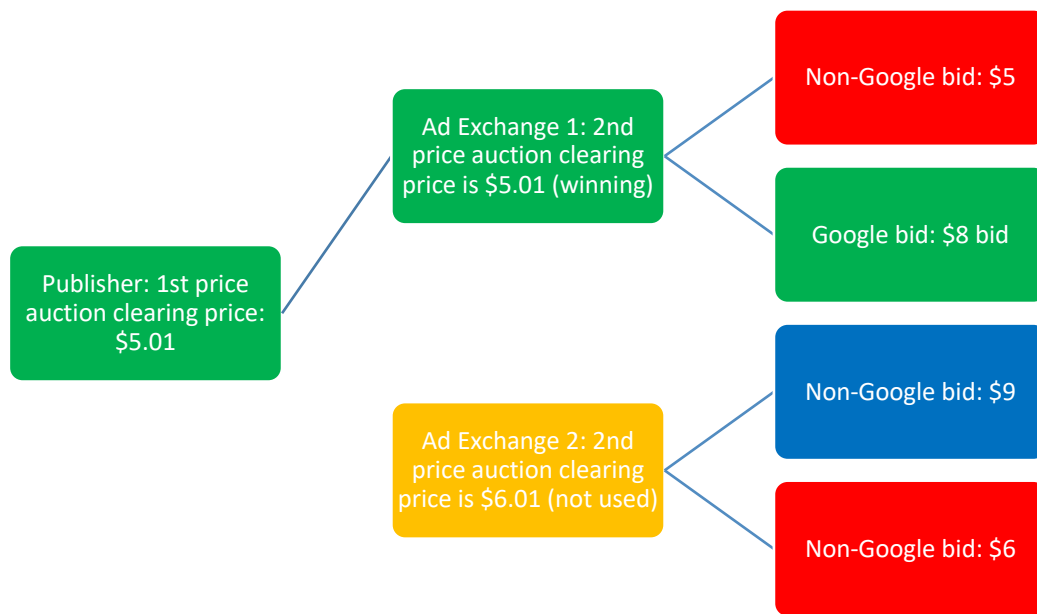


Figure 3: Example Lost Opportunity Due to Google's Waterfall Conduct

98. The Waterfall System excluded rival Ad Exchanges and deprived publishers of the opportunity to reach the entire universe of Ad Exchanges. If an Ad Exchange with an early place in the waterfall sequence produced a bid above the publisher's minimum acceptable price, that early bid would win the impression—even if an Ad Exchange later in the waterfall sequence had elicited a substantially higher bid. This approach disadvantaged publishers and drove volume to Google's Ad Exchange at the expense of Google's rivals, particularly as compared to what would

1 occur in a simultaneous auction, because advertisers that valued the slots the highest were not  
2 permitted to bid and thus publishers could not maximize revenues for their ad impressions.

3 99. An additional issue created by the Waterfall System was slow-loading  
4 advertisements. The process of conducting successive auctions sometimes took long enough that  
5 users often left a page before the advertisement loaded, creating issues with tracking ad  
6 performance and potentially causing the publisher's content to load more slowly and diminishing  
7 user experience.

## 8 **2. Dynamic Allocation (2009)**

9 100. Beginning in or around 2009, Google's publisher Ad Server began using a system  
10 called "Dynamic Allocation" as a supplement to the Waterfall System.

11 101. With Dynamic Allocation, Google's publisher Ad Server gave Google's own Ad  
12 Exchange an advantage through a two-step process. Initially, the publisher Ad Server conducted  
13 a Google Ad Exchange auction using the highest estimated bid from any ad source in the Waterfall  
14 System as the reserve price. If Google's Ad Exchange auction beat that highest estimated price,  
15 Google placed the ad from its Ad Exchange auction as the winner, with no other ad source even  
16 given the opportunity to bid. Rival Ad Exchanges were permitted to compete in a secondary  
17 Waterfall if, and only if, Google's Ad Exchange failed to beat the reserve price.

18 102. The dynamic allocation system thus gave Google's Ad Exchange a privileged  
19 position as the default first ad source in the Waterfall System. This first-in-line privilege, granted  
20 by Google's publisher Ad Server, effectively drove advertisers to use Google's Ad Exchange, at  
21 the expense of Google's Ad Exchange rivals, because advertisers knew that if they submitted the  
22 same bid on Google's Ad Exchange and on a competing Exchange, the bid on Google's Ad  
23 Exchange was more likely to win due to Google Ad Exchange's priority in the waterfall. Thus,  
24 Google used its publisher Ad Server monopoly power to expand its Ad Exchange dominance. In  
25 turn, Google's enhanced Ad Exchange dominance reinforced its publisher Ad Server dominance  
26 through network effects and feedback loop dynamics, as elaborated below at paragraph 123 *et*  
27 *seq.*



1           103. Dynamic Allocation did nothing to address the inefficiencies of the Waterfall  
2 System; rather, it capitalized on and reinforced those inefficiencies by imposing Google as the  
3 default first ad source.

4                           **3. Last Look (2014)**

5           104. In 2014, Google coupled its Ad Exchange's first-in-line privilege with a new  
6 feature called "Last Look," that changed the way in which bids were accepted by the Waterfall  
7 System and allowed Google the opportunity to outbid other ad sources on every impression,  
8 further disadvantaging rival ad exchanges. The Google Ad Exchange would wait for other  
9 exchanges to submit their bids before making its own, a dynamic that left Google always in a  
10 position to outbid its rivals. By having the "last look," Google's Ad Exchange could simply bid  
11 \$5.01 when the highest bid for a particular user from another exchange was \$5.

12           105. Combined with its pre-existing first-in-line privilege, Google's last look allowed  
13 it to suppress the range of bids that publishers received from all ad sources. Secure that its last  
14 look would allow it to ultimately win any bid, Google's Ad Exchange could evaluate the  
15 impression and confidently low-ball its initial bid. The operator of the next exchange in the  
16 waterfall was aware that it was bidding after Google's Ad Exchange and would only have an  
17 opportunity to bid if Google's Ad Exchange bid did not meet the reserve the publisher had set.  
18 Because Google was known to have an information advantage concerning users, and hence the  
19 value of impressions, Google Ad Exchange's low-ball first-in-line bidding caused competing  
20 exchanges to undervalue impressions and lower their own bids. Over time, because the exchanges  
21 bid at such low levels, it depressed the bids and payments to publishers, dramatically harming  
22 publishers. It also foreclosed competition because rival Ad Exchanges and Ad Networks did not  
23 get a chance to bid on impressions offered through Google's Ad Exchange unless and until  
24 Google had decided to forego the opportunity.

25                           **4. Enhanced Dynamic Allocation (2014)**

26           106. That same year, in 2014, Google implemented "Enhanced Dynamic Allocation,"  
27 through which Google's Ad Exchange used an adjusted price from the highest value direct deal  
28 the publisher had arranged as the reserve price for its own auction.

1           107. Enhanced Dynamic Allocation conferred an even greater advantage on Google's  
2 own Ad Exchange than the earlier version of dynamic allocation by allowing Google to prioritize  
3 Google's Ad Exchange even ahead of publishers' direct-sold deals in the Waterfall System.

4           108. Under this revised mechanism, non-Google Ad Exchanges would only have an  
5 opportunity to bid if (1) Google's Ad Exchange failed to meet the reserve; (2) there was no direct  
6 deal qualifying for the space; and (3) the publisher Ad Server reached the other Ad Exchange in  
7 the Waterfall System.

8           109. While this process created the potential to increase publisher revenues in the short  
9 term (by selling incrementally higher-revenue programmatic ads over direct deals), overall, the  
10 ultimate effect was to weaken publishers' direct sales channels and drive more advertisers to  
11 programmatic channels, where Google could extract more profits through its higher take rate on  
12 automated ad placement.

#### 13                   **5. Header Bidding (2015)**

14           110. To address the inefficiencies and to redress the artificial barriers to competition  
15 from rival exchanges created by Google's Waterfall System and Google's Dynamic Allocation  
16 processes, publishers and ad tech competitors began to develop and implement a process known  
17 as "header bidding." This system gave every ad buyer an equal chance to bid on the same  
18 inventory at the same time, leading to direct competition between bidders, leveling the playing  
19 field for rival Ad Exchanges, and ultimately generating more ad revenue for publishers.

20           111. Header bidding sends ad requests to the publishers' ad sources who then submit  
21 their bids simultaneously, avoiding the Waterfall System altogether. With the Waterfall System,  
22 once the publisher ad server identifies an ad source in the Waterfall that meets the reserve price,  
23 the process is over. Because header bidding involves all ad sources bidding simultaneously, it  
24 allows the highest bidder to prevail, and thus is the only system consistent with full and fair  
25 competition.

26           112. But here, too, Google was unwilling to compete head-to-head with rival Ad  
27 Exchanges after publishers began using heading bidding. Google used its market dominant  
28 publisher Ad Server to interfere with the mechanism its header bidding competitors used to handle

1 simultaneous bids, extending Google’s “last look” advantage to this new environment.  
2 Specifically, Google made its Ad Exchange bid available in Google’s publisher Ad Server only  
3 *after* the header bidding auction was complete, in effect nullifying the competition that header  
4 bidding provided. Google thus again granted itself a last look anticompetitive advantage over its  
5 competitors—one not based on the merits and enabled solely by the gatekeeper role Google took  
6 for itself through its dominance of the Ad Server market.

7 113. By retaining a last look, Google’s Ad Exchange must only beat the header bidding  
8 clearing price. Even though a header bidding advertiser would be willing to pay more than its  
9 winning bid, Google’s last look results in a lower sale price because Google’s winning bidder and  
10 the header bidding winner did not have to determine which would bid the highest in an auction  
11 between them. For example, if the winning header bidding advertiser is willing to bid \$2.50 but  
12 needs only \$2.00 to clear the header bidding auction, Google’s last-look advantage would allow  
13 Google’s advertiser to win the auction at \$2.01 rather than needing \$2.51 to beat the price the  
14 header bidding winner was willing to pay. As a result, Google continued to use its last look—  
15 which it was able to impose because of dominance in Ad Servers—to bid the lowest amount  
16 needed to beat the header bidding auction clearing price, rather than competing directly with the  
17 header bidding auction participants, all to the detriment of publishers, as illustrated on the  
18 following page.

19 //

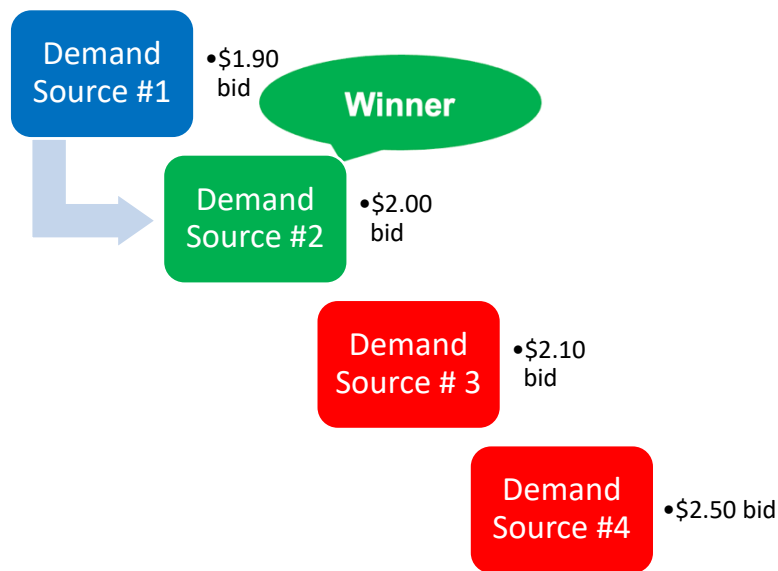


Figure 4: Example Waterfall with \$2.00 Bid Floor

**Versus**

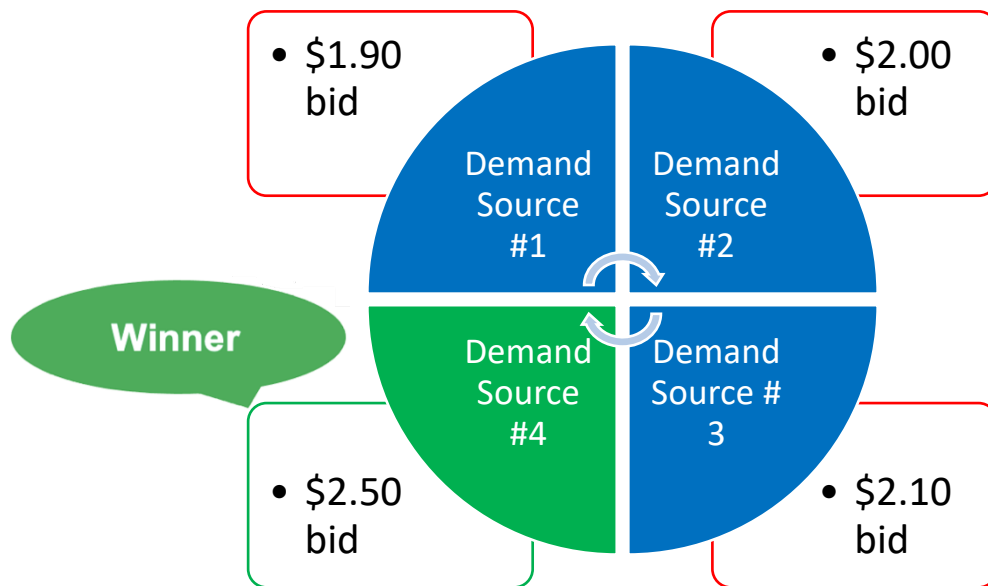


Figure 5: Header Bidding with \$2.00 Bid Floor

114. Google further sought to blunt the competitive threat of header bidding through its design of Accelerated Mobile Pages (“AMP”). AMP was designed to render websites built on the framework with header bidding incompatible with its applications. As a result, publishers could not utilize header bidding without being penalized for doing so (both financially and through the inability of users to see/reach their sites), which substantially removed the financial

1 benefit of competition on the merits that header bidding had provided to publishers. More  
2 recently, Google has introduced an AMP solution that allows client-side header bidding, but it  
3 imposes strict limits on the number of ad sources allowed to participate in bidding and a time  
4 constraint on response times from ad sources.

5 115. Further, by reserving a last look for its Ad Exchange, Google drives more  
6 advertisers to its Ad Exchange product because those advertisers know that Google's Ad  
7 Exchange is more likely to take the transaction even if the same bid is placed across multiple Ad  
8 Exchanges. As a result, Google's last look drives advertisers to place more bids on Google's Ad  
9 Exchange than on rival Ad Exchanges, artificially driving more market share to Google.

10 116. Prior to Google's use of its monopoly power in the Publisher Ad Server market  
11 to advantage itself and disadvantage its rivals, as alleged above, header bidding had enhanced  
12 competition between Ad Exchanges and Ad Networks and led to substantial increases in  
13 winning prices for impressions, by as much as 25–50% and in some cases up to 70%. This  
14 increase in impression prices for publishers under header bidding, which Google intentionally  
15 squelched, is evidence of some of the harm publishers suffered by virtue of Google's use of its  
16 monopoly power in the Ad Server market to reduce competition in the Ad Exchange and Ad  
17 Network markets.

18 **C. Google Uses “Open Bidding” to Tax its Competitors in a Classic Raising**  
19 **Rivals’ Costs Strategy.**

20 117. In April 2018, Google went one step further to suppress the competitive benefits  
21 of header bidding for publishers by launching its direct competitor header bidding, a system  
22 conducted by its dominant publisher Ad Server under the name “Exchange Bidding with Dynamic  
23 Allocation,” later named “Open Bidding.” Google used its publisher Ad Server to effectively  
24 force Exchange Bidding on publishers by interfering with the JavaScript code that rival Ad  
25 Exchanges had used to place advertisements through header bidding.

26 118. Google introduced Exchange Bidding to prevent header bidding from undermining  
27 Google's market dominance. Exchange Bidding is a unified auction between bidders on rival Ad  
28 Exchanges that is, in essence, a form of server-side header bidding. Each time inventory is for

1 sale, with Exchange Bidding activated by the publisher through the publisher's ad server, the  
 2 Google publisher Ad Server runs consecutive auctions as follows:

- 3 • First, Google conducts an internal second-price auction among advertisers  
 4 using its Google Ads tool within to select the highest bidder.
- 5 • Second, the winning Google Ads bid competes with other ad sources in a  
 6 second-price auction within Google's Ad Exchange.
- 7 • Third, Google conducts the Exchange Bidding auction, a final first-price  
 8 auction where Google's Ad Exchange competes against rival Ad Exchanges.

9 119. In that final auction, however, if the winning bidder of the Exchange Bidding  
 10 auction uses a non-Google Ad Exchange, Google imposes an explicit 5–15% surcharge or tax on  
 11 the winning bid.

12 120. Google chose to structure and apply this surcharge to maximize its anticompetitive  
 13 impact: by imposing it as part of the bidding process, as opposed to after-the-fact. In other words,  
 14 the tax operates to reduce the bid amount by 5–15%. As a result, the surcharge has the intended  
 15 effect of suppressing the amount that advertisers from competing Exchanges are shown to be  
 16 bidding for an impression. This structure has two consequences. First, bids as input from  
 17 Google's Ad Exchange (which do not incur the surcharge) can win auctions even if those bids are  
 18 lower than those of the rival Ad Exchange absent the surcharge; in this way, the surcharge *both*  
 19 drives more wins towards Google's Ad Exchange *and* suppresses the revenues publishers earn  
 20 from winning bids. Second, even when a rival Ad Exchange bidder wins an auction in spite of  
 21 the surcharge, the publisher will receive less money for that impression than it otherwise would  
 22 have received absent the surcharge. Had Google's publisher Ad Server imposed the surcharge  
 23 on winning bids from rival Ad Exchanges after-the-fact, Google would have had to bid against  
 24 the full value of the rival Ad Exchange bid, and thus pay more to win the ad. That would have  
 25 resulted in more money for publishers and more wins by competing Ad Exchanges.

26 121. For example, assume the surcharge is 10% and minimum bid increments are \$0.05.

- 27 • **Scenario 1: Surcharge is imposed as part of the bid in the auction:** If Ad  
 28 Exchange A has a winning bid of \$1.00, it is entered into the publisher Ad

Server Open Bidding auction as \$0.90, and Google's Ad Exchange must bid at least \$0.95 to win the auction. If Google's Ad Exchange wins, the publisher receives \$0.95; if Ad Exchange A wins, the publisher receives \$0.90.

- **Scenario 2: Surcharge is imposed after the auction:** If Ad Exchange A again has a winning bid of \$1.00, Google's Ad Exchange must now bid at least \$1.05 to win. If Google wins, the publisher receives \$1.05; if Ad Exchange A wins, the publisher receives \$0.90.

122. While publishers receive the same amount if a rival Ad Exchange wins under either scenario, publishers receive significantly lower amounts when Google wins if the surcharge is imposed as part of the bidding process (Scenario 1). Moreover, structuring the surcharge as part of the bid necessarily results in more winning bids by the Google Ad Exchange, and again adds to Google's power in the Ad Exchange market literally at publishers' expense. Google's surcharge on rivals reduces competition in the Ad Exchange market, to the detriment of publishers. Ironically, Google imposes this tax through business rules imposed by its publisher Ad Server—the very software product that purports to serve the interests of Google's publisher clients.

**D. Google Has Combined its Publisher Ad Server and Ad Exchange Products Under Ad Manager, Further Excluding Rivals and Raising Barriers to Entry.**

123. Google further responded to competition from header bidding by locking critical Ad Exchange functionality into its publisher Ad Server and ultimately marketing and selling both products under a single product name, Google Ad Manager. Google's combination of the two products into one further pushes publishers into Google's Ad Exchange because Google has locked advertisers behind its Ad Manager product. The market's network effects then create a feedback loop: those additional publishers make Google's Ad Exchange even more necessary to advertisers, which in turn entices more publishers to install Google's publisher Ad Server. The more transactions that Google's publisher Ad Server sends to its Ad Exchange, the more surcharges Google is able to impose on its Ad Exchange rivals, thereby continuing to build its share and dominance in the Ad Exchange market. The tying of these two products together as



1 one substantially forecloses rival Ad Exchanges by subjecting them to ever more surcharging by  
2 Google.

3 124. In order to reach a significant portion of Google's large stable of advertisers,  
4 publishers have no realistic alternative but to place their impressions on the Google Ad Exchange.  
5 In order to do so, publishers are compelled, through Google's tying arrangements to use the  
6 Google publisher Ad Server under the Ad Manager umbrella. The new Ad Manager serves as the  
7 latest nail in the coffin for any competing publisher Ad Server, or for any potential entrant into  
8 the publisher Ad Server market, further maintaining Google's existing monopoly power in the  
9 publisher Ad Server market.

10 125. Having compelled the use of both the publisher Ad Server and Ad Exchange by  
11 publishers that might want only one or the other, Google has maintained, strengthened, and  
12 expanded its dominance in *both* markets, thereby enhancing Google's power through other  
13 challenged anticompetitive conduct, such as surcharging rivals and misusing the publisher Ad  
14 Server to steal auction wins from its Ad Exchange competitors, to foreclose competition.

15 126. Forcing Google's Ad Exchange customers to use Google's publisher Ad Server,  
16 and *vice versa*, raises additional barriers to entry in the relevant markets that already posed a high  
17 bar given Google's massive stable of advertisers. Google's conduct has both the goal and effect  
18 of gaining control over the entire range of Ad Tech Stack products, squelching innovation, and  
19 locking publishers into a Google-controlled network—all of which allows Google to extract more  
20 revenue from publishers.

21 127. Microsoft used similar anticompetitive strategies in the 1990s. For example,  
22 Microsoft correctly recognized that the web browser could displace the operating system as the  
23 most important computer interface. The web browser is an application that sits on top of a "stack"  
24 or layers of software, with the operating system at its foundation. Microsoft used its Windows  
25 operating system monopoly to force consumers to install, load, and use Internet Explorer instead  
26 of a rival web browser. By so doing, Microsoft was both expanding its monopoly "upward" in  
27 the stack—from the operating system into web browsers—and maintaining its operating system  
28 monopoly by making the web browser dependent on Windows. Similarly, Google seeks to

1 maintain and expand control throughout the entire advertising technology stack (including the  
2 publisher Ad Server and Ad Exchange/Ad Network markets) by forcing its publisher Ad Server  
3 and Ad Exchange or Ad Network products together. Google, like Microsoft before it, is thereby  
4 squelching innovation and locking its users into a Google-controlled system from top to bottom.

5 128. Google ties its AdSense Ad Server product with its Ad Network (the Google  
6 Display Network). Google does so by requiring publishers who seek access to advertisers that  
7 purchase advertising space through the Google Display Network to use a Google Ad Server.

8 129. As set forth below, the Ad Server and Ad Network markets are distinct products  
9 situated within distinct markets. For publishers whose traffic volume does not reach the Ad  
10 Exchange thresholds, they must purchase services in both the Ad Server market (to identify the  
11 creation of ad inventory and facilitate placement of advertisements) and the Ad Network market  
12 (to sell their ad inventory identified by the Ad Server).

13 130. As set forth above, Google has market and monopoly power in the Ad Network  
14 market through its offering, the Google Display Network. The Google Display Network has a  
15 substantial market share in the Ad Network market (in excess of 50%) with potential rivals being  
16 small and fragmented. Thus, rational publishers selling ad inventory through Ad Networks must  
17 have access to the substantial pool of advertiser demand that Google's Ad Network represents.

18 131. Publishers therefore need Google's Ad Server products (AdSense and Ad  
19 Manager) as tools to sell their advertising inventory through Ad Networks. Smaller publishers  
20 are the primary providers of ad inventory sold through Ad Networks. Because of their size, small  
21 publishers cannot access Ad Exchanges. Further, smaller publishers also primarily use Google's  
22 AdSense Ad Server because Google's Ad Manager Ad Server product requires complex  
23 configurations that are not important to small publishers and impose unnecessary costs on them  
24 with little offsetting benefit. Because of Google's tie, Google's AdSense Ad Server connects  
25 exclusively to Google's Ad Network and blocks access to rival Ad Networks or Ad Exchanges.  
26 AdSense thus constitutes an illegal tie of its Ad Server product to the Google Display Network.

27 132. Through this conduct, Google effectively coerces publishers to use Google's Ad  
28 Server product, principally AdSense, because it is the only means by which publishers can gain

1 access to Google's market dominant pool of advertisers through the Google Display Network.

2 133. This tying arrangement is extremely effective. Google's Ad Server offerings—  
3 which are the only means of accessing the demand flowing through Google's Ad Network—have  
4 a dominant market share (over 80%). Further, Google's dominance over small publishers that  
5 rely on the Google Display Network (because their traffic volume does not qualify for Google's  
6 Ad Exchange) allows Google to extract an artificially high take rate directly from publishers for  
7 selling those publishers' ad inventories.

8 134. Google's Ad Server dominance then reinforces its market power in the Ad  
9 Network market. Indeed, for advertisers to reach publishers' ad inventory who use the AdSense  
10 Ad Server, such advertisers must purchase advertising through the Google Display Network.  
11 Because the AdSense Ad Server has a dominant share of such publishers and such publishers'  
12 inventory is only available to advertisers through the Google Display Network, Google is able to,  
13 and does, amass and retain a substantial pool of advertisers purchasing through the Google  
14 Display Network.

15 135. Google also uses its control over large publishers, gained through the conduct  
16 alleged herein, to reinforce its control over advertisers in its Ad Network and, necessarily, its  
17 control over small- and medium-sized publishers using AdSense. By using its Ad Manager to  
18 exclude or impair competition from non-Google sources of advertising demand (*e.g.*, non-Google  
19 Ad Exchanges and Ad Networks), including by preventing bidding from non-Google advertising  
20 clients on equal terms for Google's larger publisher clients' inventories, Google impairs  
21 competing Ad Exchanges and Ad Networks in their ability to win auctions for larger publisher ad  
22 inventory. This conduct, in turn, impairs those actual or potential competing Ad Exchanges and  
23 Ad Networks from acquiring or maintaining (much less growing) their pools of advertising  
24 demand. Further, as a result of the conduct alleged herein, those potential competing Ad  
25 Networks and Ad Exchanges are unable to provide publishers with advertising demand  
26 comparable to Google, and thus none is able to replace the Google Display Network's function  
27 for small- and medium-sized publishers, which further locks those publishers into Google's  
28 AdSense due to Google's tying or *Microsoft*-like anticompetitive bundling strategy.

1           136. As a result of the conduct alleged above, Google is able to overcharge AdSense  
2 customers for Google's Ad Server and Ad Network services because such smaller publishers have  
3 nowhere else to turn.

4           **E. Google Excludes Rival Ad Networks Under the Guise of Policing Malicious**  
5           **Code.**

6           137. Ad Networks act as intermediaries, helping to match advertisers with small and  
7 medium-sized publishers whose page views are not high enough to allow them to offer their  
8 advertising inventory directly on the more sophisticated Ad Exchange marketplaces.

9           138. Under the false pretext of controlling problematic code, Google's publisher Ad  
10 Server excluded rival Ad Networks from competing for impressions, thereby driving more  
11 business to the Google Ad Network and diminishing publisher revenues. Google's publisher Ad  
12 Server informed the publisher and the rival Ad Network that there was a problem with the rival  
13 Ad Network's code. The Ad Server removed the rival Ad Network's code, which effectively  
14 precluded the rival from competing for the publisher's impressions. The rival Ad Network was  
15 then forced to resubmit the same code to the publisher's Ad Server, which required extensive  
16 work and hours of labor by staff at both the rival Ad Network and the publisher, and jeopardized  
17 the rival Ad Network's business relationship with the affected publisher. Moreover, while this  
18 work was in process, the rival Ad Network was not permitted to compete for that publisher's  
19 impressions in the Google publisher Ad Server.

20           139. This recurring practice, instituted by the Google publisher Ad Server, injured rival  
21 Ad Networks by imposing unnecessary additional costs on publishers seeking to use the rival Ad  
22 Networks in conjunction with their Google Ad Server. Publishers were injured, in part, because  
23 impaired rivals included Ad Networks that paid more for the same inventory than Google's Ad  
24 Network was willing to offer. Through its anticompetitive conduct, Google has used its monopoly  
25 power in publisher Ad Servers to monopolize or attempt to monopolize the Ad Network market,  
26 and as with Google's conduct in the Ad Exchange market, the impacts of these acts are  
27 exacerbated by indirect network effects.  
28

**F. Google Uses Its Publisher Ad Server to Impose Rate Structures that Raise Rivals' Costs.**

140. In addition to the surcharge on rival Ad Exchanges discussed above, Google uses its publisher Ad Server to raise its rivals' costs in other ways. Through Google Ad Manager, Google imposes a rate structure that lowers publishers' revenues if an advertisement is placed using a rival Ad Network or Ad Exchange under certain circumstances.

141. For instance, Google's publisher Ad Server may impose an "Audience" fee that is as much as 100% higher when advertisements are placed through a non-Google Ad Network or Ad Exchange (*e.g.*, a 5-cent fee for a certain number of Google-placed advertisements, but a 10-cent fee for the same number of competitor-placed advertisements). Google deploys other fee structures that achieve a similar economic effect by "including" a certain number of Google-placed advertisements at certain price tiers, while "excluding" non-Google-placed advertisements so that publishers incur additional fees when they do business with a competitor.

142. Google's course of conduct is designed to force publishers to deal exclusively with Google and punish those who do not. Google's conduct has the purpose and effect of making it uneconomical to use a rival Ad Exchange or rival Ad Network, thereby coercing publishers to exclusively use Google's publisher Ad Server and Ad Exchange. Put differently, Google punishes customers who choose not to deal exclusively with Google.

143. Google's surcharges and discriminatory rate structures make it uneconomical for publishers to substitute a rival publisher Ad Server, Ad Exchange, or Ad Network. Because Google's surcharges and rate structures cannot be supported by legitimate business justifications, they serve no purpose but to keep publishers locked into Google's advertising products by penalizing customers who attempt to substitute a rival product.

144. Google's Ad Manager conduct serves the same end because, by compelling publishers who need access to Google's dominant Ad Exchange or Ad Network to use Google's publisher Ad Server, Google punishes publishers who attempt to use rivals' products by increasing the cost of doing so.

**G. Google Uses Its Publisher Ad Server to Raise Rivals' Costs by Degrading the Transaction-Related Data Provided to Transaction Participants.**

145. In the online display advertising market, the value of an impression can be heavily affected by the extent and nature of information available about the viewer or user of the publisher's webpage, including any characteristics or known preferences that might make that user more likely to purchase a particular product or service.

146. The online display advertising market is characterized by information asymmetry. A user's identity may be linked to their email address, their mobile phone number, the IP address of their home or work desktop, or the IMEI identifier of their mobile device.

147. Moreover, participants in the online display marketplace gain information about users in a variety of ways. Publishers may learn about user preferences based on information users provide the publisher and the content they access. Google learns about user preferences through their search history and through their browsing history on the Google-owned Chrome browser. A number of participants and data brokers also sell, share, and otherwise exchange pertinent information about users and publishers to other marketplace participants.

148. Of particular importance, all participants in the marketplace, publishers, advertisers, and their intermediaries, Ad Networks and Ad Exchanges, learn about viewer preference through the viewer's interaction with advertisements, *i.e.*, which ads they click on to learn about a product, which products they actually purchase as reflected in attribution statistics, and which ads they ignore. In a competitive market, all of the information that is associated with a transaction is ordinarily available to all transaction participants. Of particular importance, publishers can use their Ad Server tool to provide their proprietary user information to the intermediary Ad Exchanges and Ad Networks on which the publisher offers its impressions.

149. When an impression is made available for purchase through an Ad Network or Ad Exchange, both the publisher, via its Ad Server, and the intermediary Ad Network or Ad Exchange will provide substantive information about the user in order to inform advertisers. When more information is made available, a broader range of advertisers will be interested in purchasing the impression, and the impression will be more valuable. As a result, in order to

1 effectively compete in the online advertising marketplace, both publishers and intermediaries  
2 seek to maximize the amount and quality of information they have about users.

3 150. Moreover, because information about users is asymmetrically available,  
4 publishers will maximize the value of their impressions not only by reaching the greatest number  
5 of advertisers, but by offering their impression through the largest number of intermediaries, Ad  
6 Networks and Ad Exchanges, because each of these intermediaries may offer distinct and  
7 different information about the user.

8 151. For example, assume User John Smith is reading the New York Times webpage  
9 on Travel. The New York Times knows that John Smith is 35, that he reads articles about outdoor  
10 sports, financial markets, environmental concerns, and wellness. The New York Times offers  
11 John Smith's impression for sale on Google's Ad Exchange, on Rival Ad Exchange1, and on  
12 Rival Ad Exchange2. Google's Ad Exchange knows that John Smith has also expressed an  
13 interest in backpacks, throwback hockey jerseys, and Asian cuisine. Rival Ad Exchange1 has  
14 previously auctioned a John Smith impression, and so knows that he bought a kayak—a fact  
15 unknown to Google's Ad Exchange. Rival Ad Exchange2 has never encountered John Smith  
16 before, so it has no additional information to add to the transaction. Advertiser Premium Paddle  
17 Boards accesses John Smith's impression via all three exchanges. While Google has more  
18 information to add to the transaction than either of its competitors, the information provided by  
19 Rival Exchange1 that John Smith has previously purchased a kayak makes it much more likely  
20 that he is going to purchase a paddle board as well, so Premium Paddle Boards submits a bid  
21 substantially higher than those submitted by other advertisers, and wins the impression.

22 152. As this example illustrates, transactional data involving users is key to the online  
23 marketplace. Knowing what ads users have been shown, what ads they have ignored, what ads  
24 they have read, and what ads have actually led to a purchase provides significant information that  
25 makes a given impression more valuable to a wider range of advertisers. Moreover, a publisher  
26 will maximize the value of its impressions by offering those impressions through as many Ad  
27 Exchanges and Ad Networks as possible, because each of those intermediaries could potentially  
28 provide information about the user that makes the impression much more valuable to a given



1 advertiser.

2 153. Through a variety of actions, Google has raised rivals' costs by denigrating the  
3 transactional information available to publishers and rival intermediaries in the online advertising  
4 marketplace. Limiting the transactional information available to rival intermediaries raises their  
5 costs because user information is one of the most valuable inputs the intermediary can offer a  
6 publisher. If rival Ad Networks and Ad Exchanges are limited in the user information they can  
7 obtain from transactions, they will have to purchase user information elsewhere. Limiting the  
8 transactional information available to publishers raises the costs of rival Ad Networks and Ad  
9 Exchanges because publisher information is a surrogate for the intermediary's information; the  
10 more user information the publisher possesses, the less dependent the publisher is on the  
11 information provided by intermediaries, and the more rival intermediaries can compete on the  
12 basis of other factors like cost, speed, service.

13 154. Google's efforts to degrade the transactional information available to publishers  
14 and to rival Ad Networks and Ad Exchanges has taken a variety of forms. Initially, when Google  
15 purchased DoubleClick for Publishers, a consistent user identifier was provided to both  
16 advertisers and publishers, which allowed them to independently aggregate information about the  
17 user without needing the intermediary. Google degraded the information available to others in  
18 the market, preserving complete information only for itself, by hashing user identifiers and  
19 providing different identifiers for the same user to the advertiser, on the one hand, and the  
20 publisher on the other. Google likewise denies publishers user and transactional information  
21 when impressions are placed on a publisher's AMP page, a fast-loading news page that is part of  
22 the Google news carousel, because AMP pages are both cached and served by Google. Google's  
23 plan to eliminate third-party cookies on the Chrome browser will preclude publishers from  
24 tracking their users to other sites for purposes of ad attribution, even when the publishers have  
25 obtained their users' consent to do so. It will also erode the capacity of third-party data entities  
26 to provide rival Ad Networks and Ad Exchanges with information needed to compete with Google  
27 in that space.

28 155. Google's actions have had the intended effect of raising the costs of rival Ad

1 Networks and Ad Exchanges by denigrating the quality and extent of user information that would  
 2 otherwise be available in the marketplace. Google's actions are made possible through its control  
 3 of the publisher Ad Server, through its monopoly power in search, and its monopoly power in the  
 4 browser market.

5 156. Distinct from user information, post-transactional information helps publishers to  
 6 evaluate competing intermediaries in the market and aids Ad Exchanges in developing strategies  
 7 to help both its advertiser and publisher clients. Post-transactional information is the information  
 8 regarding the consummated sale of the impression, and can include, without limitation, the  
 9 winning bid price, the bids placed by each competing ad exchange, and whether the serving of  
 10 the impression resulted in a user click or purchase.

11 157. Most recently, in the context of Exchange Bidding, Google has limited the post-  
 12 transactional information available to publishers, refusing to provide the publisher with the  
 13 individual bids offered by rival exchanges—key information that allows the publisher to evaluate  
 14 rival Ad Exchanges and compare them to Google's Ad Exchange. Rival Ad Exchanges  
 15 submitting bids to the publisher Ad Server as part of Google's Exchange Bidding also suffer a  
 16 degradation of transactional information, receiving less information about the transaction than  
 17 they had obtained through the header bidding process. This Google-created opacity reduces  
 18 market efficiency and makes it difficult to detect Google's bid manipulation because knowing  
 19 only the winning bid does not disclose whether it was also the high bid. Google's conduct also  
 20 raises barriers to entry and impedes data analytics and innovation from rival vendors.

#### 21 **IV. THE RELEVANT MARKETS**

22 158. This case focuses on the markets for three products: publisher Ad Servers, Ad  
 23 Exchanges, and Ad Networks.

24 159. Google has market or monopoly power in each of the relevant product markets.

25 160. Publisher Ad Servers are the means and “decision engine” for determining which  
 26 advertisements to display. They are the inventory management systems that publishers use to  
 27 holistically manage their online display advertising inventory—the image-based graphical ads  
 28 alongside web content—impose and administer the rules for offering advertising impressions for

1 sale, and selecting which ad to display. Publisher Ad Servers provide features such as: (1) the  
2 ability to solicit and organize bids from sources of advertising demand (*i.e.*, direct-sold ads, Ad  
3 Exchanges, and Ad Networks); (2) reservation-based sales technology to support a publisher's  
4 direct sales efforts; (3) inventory forecasting technology to help a publisher determine what  
5 inventory will be available to sell; (4) a user interface through which a publisher's sales team can  
6 input directly sold campaign requirements; (5) co-management of direct and indirect sales  
7 channels; (6) report generation of ad inventory performance; (7) invoicing capabilities for a  
8 publisher's direct campaigns; and (8) yield management technology.

9 161. In the market for publisher Ad Servers, publishers purchase the Ad Server services  
10 from providers, such as Google. No other service is substitutable for, or reasonably  
11 interchangeable with, an Ad Server from the perspective of publishers.

12 162. In other words, if a hypothetical entity with monopoly power in the Ad Server  
13 market imposed a small but significant non-transitory increase in price for its publisher Ad Server,  
14 sufficient publishers would not replace the Ad Server function with another product or service so  
15 as to make the price increase unprofitable.

16 163. Ad Exchanges match two different categories of customers (advertisers and  
17 publishers). They provide a service like a clearinghouse or auction house that is distinct from the  
18 publisher Ad Server product, which connects publishers to the Ad Exchanges and Ad Networks  
19 and which controls whether and how certain advertising content is delivered from the publisher's  
20 website and displayed to the website's viewer

21 164. If a hypothetical entity with monopoly power with respect to Ad Exchanges  
22 implemented a small but significant increase in the price it would not cause a sufficient number  
23 of publishers to switch to another product so as to cause that price increase to be unprofitable. No  
24 other product or service provide a real-time auction marketplace with the unique features and  
25 access to advertising demand that Ad Exchanges do.

26 165. Ad Exchanges are also not reasonably interchangeable with direct ad sales  
27 channels. Selling digital display ad inventory directly requires publishers to invest substantially  
28 in managing, selling, and serving online ad campaigns, which is an expensive proposition for

1 publishers. Similarly, direct sales channels do not access the same pool of advertisers as Ad  
2 Exchanges because buying inventory directly from publishers also requires advertisers to invest  
3 in and maintain internal staff to manage the direct ad purchases. As a result, the direct sales  
4 channel features only the highest-value publisher-advertiser transactions. Moreover, the direct  
5 sales channel functions as a complement to Ad Exchanges for those publishers and advertisers  
6 large enough to engage in those transactions, with Ad Exchanges filling the publishers' inventory  
7 not otherwise sold through the direct sales channel. Thus, a small but significant non-transitory  
8 increase in the price of Ad Exchanges would not cause sufficient publishers to switch to direct  
9 sales to make the price increase unprofitable.

10 166. Ad Networks offer fewer services than Ad Exchanges and are a separate product  
11 market serving a different group of customers (typically smaller publishers with lower web  
12 traffic). Rather than providing all the targeting and bidding features of Ad Exchanges, Ad  
13 Network placements are made based on a pool of advertising inventory. Because they do not  
14 have the sophisticated targeting and bidding features inherent in Ad Exchanges, Ad Networks  
15 largely cater to smaller publishers and smaller advertisers as compared with Ad Exchanges.

16 167. Similarly, Ad Networks are not reasonably interchangeable with publisher Ad  
17 Servers or advertiser buying tools for large or small advertisers. As set forth above, publisher Ad  
18 Servers primarily identify the creation of ad inventory on publishers' websites and solicit bids to  
19 fill that inventory. Ad Networks are one place Ad Servers may turn to fill that inventory. Thus,  
20 Ad Networks and Ad Exchanges perform different, but related functions. Advertiser buying tools  
21 are not substitutable for Ad Networks from the perspective of publishers because advertiser  
22 buying tools serve different customers (advertisers) and perform a different function, working to  
23 facilitate advertisers' purchases in Ad Exchanges. Therefore, a small but significant non-  
24 transitory increase in the price of a hypothetical monopolist's Ad Network's services would not  
25 cause a sufficient number of publishers to switch to an Ad Exchange, Ad Server, or an advertiser  
26 buying tool, to make that price increase unprofitable because none of those other products  
27 provides publishers using Ad Networks with reasonably comparable services.

28 168. Each of the three foregoing separate product markets (publisher Ad Servers, Ad

1 Exchanges, and Ad Networks) make up a larger ecosystem, or what the industry calls “display  
2 advertising”—as opposed to video advertising or search advertising, which use different  
3 technologies that are not substitutable with the technologies publishers use for their display  
4 advertising across the internet.

5 169. Display advertising comprises two channels: owned-and-operated platforms and  
6 what is referred to as “open display advertising.” The owned-and-operated channel consists of  
7 social media platforms like Facebook and e-commerce giant Amazon, which are each vertically  
8 integrated in that they sell their own advertising inventory directly to advertisers through  
9 propriety, integrated interfaces referred to in the industry as “walled gardens.” Google, however,  
10 operates not just in such an isolated space, but instead has created advertising tools and advertising  
11 exchange services for both third party publishers and advertisers in the open display advertising  
12 marketplace. Owned-and-operated platforms and the open display advertising marketplace are  
13 not reasonable substitutes for each other and are not viewed as such by advertisers or publishers.

14 170. Google has a dominant share of the publisher Ad Server market, likely in the range  
15 of 70–90% (if not more). Indeed, the United Kingdom’s Competition & Markets Authority  
16 (“CMA”) (the U.K.’s antitrust authority) found that Google had between 90% and 100% of the  
17 publisher Ad Server market, as measured by the money advertisers paid to place ads within U.K.  
18 publishers’ content.<sup>4</sup>

19 171. Other than Google, the other sellers in the publisher Ad Server market are small  
20 and fragmented. Indeed, since 2012, Google’s closest competitors have either exited the market  
21 entirely or have been relegated to negligible market shares.

22 172. Google has also market or monopoly power in the Ad Exchange market, where it  
23 controls approximately 50% of the market, and the Ad Network market, where it controls  
24 approximately 50% of the market.

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25  
26 <sup>4</sup> See Online Platforms and Digital Advertising, Market Study Final Report (July 2020),  
27 available at [https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final\\_](https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf)  
28 report\_Digital\_ALT\_TEXT.pdf.

173. Google's market positions in the publisher Ad Server, Ad Exchange, and Ad Network markets are protected by high barriers to entry. For instance, publishers who might look to switch products face high switching costs because these server products must be programmatically and technologically built into the publishers' operations. Moreover, any potential rival seeking to gain market share at Google's expense must be able to deliver a pool of advertisers that would participate in non-Google auctions and generate comparable revenue to Google's auctions. Given that Google already has in excess of 50% of each of these markets, and uses the anticompetitive tactics alleged herein to protect those shares, the chances of any one rival gaining sufficient share to be a true competitive threat are exceedingly low.

174. Third, Google provides limited pricing information to publishers. Thus, even if there were competing publisher Ad Server, Ad Exchange, and Ad Network products for publishers to switch to, those products would have significant difficulty in demonstrating to publishers that switching is worthwhile because Google makes direct price comparisons nearly impossible.

175. These barriers inhibit entry and expansion by potential competitors in the publisher Ad Server, Ad Exchange, and Ad Network markets, evidencing Google's monopoly power.

176. The relevant geographic market is the United States, or in the alternative, predominantly English-speaking countries of the United States, Canada, the United Kingdom, and Australia. Publishers seek out publisher Ad Server services based on the service provider's ability to connect the publisher with advertisers that would seek to target the publisher's users. Because publishers sell advertising space to advertisers based on, *inter alia*, the location of the publishers' users, the geographic market's scope is determined by the publishers' targeted consumer geographies, here, the United States, or in the alternative, predominantly English-speaking countries of the United States, Canada, the United Kingdom, and Australia. A publisher Ad Server that could not connect publishers with a significant pool of advertisers seeking to target American (or alternatively, English-speaking) consumers could not generate auction returns that rivaled publisher Ad Servers that could deliver such advertiser demand.

177. Google also has monopoly power in adjacent markets—such as the market for

1 advertiser-facing ad tech products. Because many advertisers single-home, meaning they use  
 2 only one set of advertising tools to access the open display advertising marketplace, Google's  
 3 advertiser-facing ad tech products have become the sole access point to the market for a  
 4 substantial portion of all advertisers. Indeed, Google now controls 80 to 90% of the market for  
 5 advertiser tools.

6 178. Google also has monopoly power in search advertising, web browsers, and phone  
 7 operating systems. Google's power in these adjacent markets bears on Google's market power  
 8 in the relevant markets and their barriers to entry. These adjacent markets allow Google to lock  
 9 customers into, and keep them dependent on, its ecosystem, but they are not the markets in which  
 10 the challenged conduct occurred. For instance, Google has used its search and mobile dominance  
 11 to strong-arm publishers into a scheme called "AMP," whereby Google takes publisher content  
 12 and hosts it on Google's own systems—thus ensuring that users never leave Google's websites  
 13 even when viewing the non-Google content. This allows Google to independently collect and  
 14 retain information concerning the publishers' consumers, allowing Google to benefit from and  
 15 control advertising associated with content created by others.

## 16 **V. SUBSTANTIAL FORECLOSURE AND ANTICOMPETITIVE EFFECTS**

17 179. Google's conduct goes far beyond aggressive competition. Google's  
 18 anticompetitive actions intend to, and in fact do, exclude, substantially foreclose, and impair rivals  
 19 and harm the competitive process. The conduct is not competition on the merits or otherwise  
 20 privileged. Worse yet, the conduct has been systematically planned and thoroughly executed over  
 21 many years; it is willful.

22 180. Through the actions alleged above, Google has substantially foreclosed  
 23 competition in each of the three alleged relevant markets.

24 181. Google's conduct adversely affects competition and innovation in each of the  
 25 relevant markets, including by, *inter alia*:

- 26 • Impairing the incentive of Google's competitors and potential competitors to
- 27 undertake research and development, because they know that Google will be
- 28 able to limit the rewards from any resulting innovation;



- Inhibiting Google's competitors that nevertheless succeed in developing promising innovations from effectively marketing their improved products to customers;
- Reducing the incentive and ability of advertising platforms, and other competitors to innovate and differentiate their products in ways that will appeal to customers;
- Reducing competition and the spur to innovation by Google and others that only competition can provide;
- Impairing and excluding rivals from the three main relevant markets alleged herein by raising rivals' costs, blocking entry and expansion, and through other anticompetitive means;
- Enabling Google to charge supracompetitive prices and overcharge publishers, by artificially inflating the take rate extracted from publisher ad sales and otherwise artificially and anti-competitively reducing the revenue Google remits to them from ad sales to advertisers.

182. Through the anticompetitive conduct described above, Google foreclosed what few service providers remained by steering auctions to Google's services and away from the other service providers, and taxing/raising such rivals' costs when the rivals managed to win auctions for Google's publisher-clients' ad inventory notwithstanding the hurdles Google imposed. Because of this conduct, potential rivals lack the ability to generate scale sufficient to compete with Google.

183. The foreclosure caused by Google's conduct in the publisher Ad Server market can be seen by the exit of competitors and limited entry over the past decade or so. Several large advertising technology firms offered publisher Ad Server solutions, including substantial competitive offerings from Yahoo!, AppNexus, and OpenX. Today, few publisher Ad Server competitors remain in the United States. Yahoo's publisher Ad Server was acquired in 2017 and shuttered in 2019. AppNexus's publisher Ad Server was acquired by AT&T and rebranded to Xandr but faces an uncertain future as AT&T is reportedly considering selling the publisher Ad

1 Server. OpenX shut down its Ad Server solution in 2019.

2 184. Entry into the publisher Ad Server market has been remarkably weak over the past  
3 decade. This lack of entry is a result of high switching costs for publishers augmented by the  
4 artificial barriers arising from Google's anticompetitive conduct. As a result, publishers have  
5 very limited alternatives to Google's publisher ad serving product, and rivals are unable to  
6 compete by improving quality or lowering price.

7 185. Google's conduct has also substantially impaired competition in the Ad Exchange  
8 and Ad Network markets, which Google has monopolized or, in the alternative, achieved a  
9 dangerous probability of monopolizing by virtue of its intentional and unlawful conduct.

10 186. Google's taxes on rivals have contributed to the consolidation of the Ad Exchange  
11 market fostering Google's maintenance and expansion of its power in that market. When Google  
12 entered that market in 2009, it was highly competitive, and had previously been populated by at  
13 least eight vigorous competitors.

14 187. Since then, in part as a direct result of Google's anticompetitive conduct, several  
15 Ad Exchanges have left the Ad Exchange business, including adBrite, Yahoo, and the ASDAQ  
16 exchange. Among the remaining major competitors, Rubicon has consistently lost money and  
17 been barely profitable. Rubicon has attempted to remain alive in the Ad Exchange business by  
18 sharply cutting its fees to percentages in the low teens or lower, a strategy which the company  
19 itself admitted may not succeed. The financial condition of OpenX, another competing privately  
20 owned Ad Exchange, is not publicly reported and therefore unknown, although it was reported to  
21 have laid off approximately 20 percent of its staff at the end of 2018, and added more layoffs  
22 earlier this year.

23 188. In the Ad Network market, Google's use of its Ad Server product to block the bids  
24 of competing Ad Networks has driven more market share to Google's own Ad Network. By  
25 anticompetitively driving additional usage of its Ad Network, Google has unlawfully maintained  
26 its monopoly or enhanced the probability of it gaining monopoly power in the Ad Network market  
27 by impeding its rivals' ability to compete on the merits, including through the use of strategies  
28 raising rivals' costs.

189. In addition to economic harm in fact to customers and competitors, the exclusion of competitors from competition on the merits, and harm to consumers from thwarting competition on the merits, Google's conduct also increases costs in distribution of products and services in the relevant markets; abuses its gatekeeping function and increases cost of market access across markets; and causes reverse network effects that result when Google's products and services are prominent and properly functioning, while those of competitors are downgraded and unlawfully shut down by Google.

190. Google's challenged conduct lacks any procompetitive justification. Moreover, the harm to competition—particularly to publishers—in the Ad Exchange, Ad Network, and publisher Ad Server markets from Google's unlawful conduct more than offsets any procompetitive benefits or justifications Google may offer.

191. Google has made the remarkable assertions that it is immune from challenges to its misconduct because its policies and practices “account of conflicting demands of publishers, advertisers, and consumers, in the interests of creating a level playing field in which the most useful ads are seen by the most relevant audiences.” Google is a business that maximizes its own revenue and self-interest. As for the rest, *antitrust law*, not Google, sets the playing field and it is an economic truth fundamental to our market system that what is most “useful” is determined through competition, not a single giant company. It is the height of arrogance for Google to claim that it should control the market, or that it can abuse its market power because it knows what is best.

## VI. CLASS ALLEGATIONS

192. Plaintiffs bring this action on behalf of themselves and as a class action under Rule 23(a), (b)(2) and (b)(3) of the Federal Rules of Civil Procedure on behalf of the following classes (“Classes”):

- Class 1 – All persons that received revenue directly from Google for displaying advertisements using Google's Ad Exchange services from December 15, 2016 through the present (“Class Period”).

1                   • Class 2 – All persons that received revenue directly from Google for displaying  
 2                   advertisements using Google’s Ad Network services during the Class Period.  
 3 Specifically excluded from the Classes are: Defendants; the officers, directors, or employees of  
 4 any Defendant; any entity in which any Defendant has a controlling interest; any affiliate, legal  
 5 representative, heir, or assign of any Defendant, and any person acting on their behalf. Also  
 6 excluded from the Classes are any judicial officer presiding over this action and the members of  
 7 his/her immediate family and judicial staff, and any juror assigned to this action.

8           193. The Classes are readily ascertainable and the records for them should exist,  
 9 including, specifically, Defendants’ own records and transaction data.

10           194. Due to the nature of the trade and commerce involved, there are thousands of  
 11 geographically dispersed members in the Classes, the exact number and their identities being  
 12 known to Defendants.

13           195. Plaintiffs’ claims are typical of the claims of the members of the Classes. Plaintiffs  
 14 and members of the Classes sustained damages arising out of Defendants’ common course of  
 15 conduct in violation of the laws alleged herein. The damages and injuries of each member of the  
 16 Classes were directly caused by Defendants’ wrongful conduct.

17           196. There are questions of law and fact common to the members of the Classes,  
 18 including, but not limited to, the following:

- 19                   • whether Google has monopoly power in the publisher Ad Server, Ad  
 20                   Exchange, and/or Ad Networks markets;
- 21                   • whether Google has imposed implicit and explicit taxes on rival Ad  
 22                   Exchanges;
- 23                   • whether the imposition of such taxes constitutes monopolization, monopoly  
 24                   maintenance, and/or attempt to monopolize the Ad Exchange market;
- 25                   • whether Google’s tie of its publisher Ad Server and Ad Exchange products  
 26                   furthers Google’s monopolization, monopoly maintenance, and/or attempt to  
 27                   monopolize the Ad Exchange market;

28

- whether Google has blocked rival Ad Networks from competing for publisher inventory;
- whether Google's conduct with respect to rival Ad Networks constitutes monopolization, monopoly maintenance, and an attempt to monopolize the Ad Network market;
- whether Google's conduct has harmed Plaintiffs and class members by reducing their revenues from the sale of their ad inventory;
- whether Google's conduct has harmed Plaintiffs and class members by causing them to pay supracompetitive prices for Google's Ad Exchange, Ad Network, and publisher Ad Server services; and
- the appropriate Class-wide measures of damages.

197. Plaintiffs will fairly and adequately protect the interests of the members of the Classes. Plaintiffs' interests are aligned with, and not antagonistic to, those of the other members of the Classes, and Plaintiffs have retained counsel competent and experienced in the prosecution of class actions and antitrust litigation to represent themselves and the Classes.

198. Questions of law or fact that are common to the members of the Classes predominate over any questions affecting only individual members of the Classes.

199. A class action is superior to other available methods for the fair and efficient adjudication of this controversy. The prosecution of separate actions by individual members of the Classes would impose heavy burdens on the courts and Defendants and would create a risk of inconsistent or varying adjudications of the questions of law and fact common to the Classes. A class action, on the other hand, would achieve substantial economies of time, effort, and expense and would assure uniformity of decision as to persons similarly situated without sacrificing procedural fairness or bringing about other undesirable results. Absent a class action, it would not be feasible for the vast majority of Class members to seek redress for the violations of law alleged herein.

1 **VII. ANTITRUST INJURY**

2       200. Plaintiffs and members of both proposed Classes have suffered antitrust injury as  
3 a direct result of Google's unlawful conduct. As a direct and proximate result of Google's  
4 anticompetitive conduct, as alleged herein, Plaintiffs and members of the Classes suffered  
5 substantial losses to their business or property by paying artificially inflated prices to Google for  
6 its services in the relevant markets and causing their revenues from selling non-search digital  
7 display advertising space to be artificially suppressed during the Class Period. The full amount  
8 of such damages will be calculated after discovery and upon proof at trial.

9       201. Due to Google's ill-gotten market power, through the conduct alleged herein,  
10 Plaintiffs and the Classes paid Google a supracompetitive cut of the advertising revenues  
11 publishers generated for user visits to their sites. Absent this anticompetitive conduct, however,  
12 Plaintiffs and members of the Classes would have paid less to Google and received more revenues  
13 for advertising on their sites.

14       202. Total damages from Google's unlawful conduct suffered by Class members during  
15 the Class Period amount, at the very least, to hundreds of millions of dollars. Google's  
16 anticompetitive conduct is continuing and so are the damages suffered by members of the Classes.

17       203. Google's conduct alleged herein manipulates the auctioning and ad placement  
18 processes in ways that favor Google and suppress the net advertising income publishers receive  
19 from Google.

20       204. Google represents the interests of two sides of the Ad Tech Stack that conflict;  
21 advertisers want to pay as little as possible, whereas publishers want to maximize their revenues.  
22 Google represents neither interest. Google instead prioritizes Google's services to maximize the  
23 revenue Google can retain from advertiser payments before transmitting the net payments to  
24 publishers; in other words, Google seeks to maximize the spread between what advertisers pay  
25 and what publishers receive in connection with each ad placement because Google retains that  
26 difference.

27       205. In a competitive market, publishers would seek out Ad Servers, Ad Exchanges,  
28 and Ad Networks that would represent the publishers' interests, including maximizing publishers'

1 revenue from auctions as opposed to prioritizing the vendors' own services to maximize the  
2 vendors' ability to capture commissions. This competition would drive down the cost of services  
3 in the Ad Tech Stack and increase publishers' ad revenues by more efficiently running auction  
4 processes, as well as improving the quality of publisher-facing ad tech services. Every  
5 stakeholder in the market—except Google—would benefit.

6       206. When Google's anticompetitive conduct is stopped, those supercompetitive take  
7 rates will be lowered by increased competition to the benefit of publishers, advertisers, and—  
8 ultimately—consumers. Google currently retains at least 30% of what Google's advertisers pay  
9 to place ads on Google's publishers' pages (and analyses of pre-2019 periods estimate that Google  
10 took around 50% of advertiser payments), and in a competitive market, Google would retain a  
11 lower share of what would likely be higher gross revenues.

12       207. Publishers' revenues would be higher absent Google's conduct for a variety of  
13 reasons including, without limitation, auction bids would be higher as participants combine into  
14 unified auctions without Google's self-preferencing and manipulations. Furthermore, absent  
15 Google's anticompetitive conduct, Google's commissions would decrease, and publishers would  
16 see higher net revenues. With more revenues, publishers would expand output creating more ad  
17 impressions for sale.

18       208. In December 2019, the CMA reached a similar conclusion after a six-month  
19 inquiry into online platforms and digital advertising. Drawing on four different data sources, the  
20 CMA estimated Google's average "take rate" by its main advertiser and publisher-facing  
21 intermediaries. It calculated an average Ad Server fee of 22% and a weighted advertiser tool fee  
22 of 18%—making the overall "take rate" for matching advertisers to publishers 40% of the total  
23 ad spend. These findings ultimately led it to conclude that "the fact that intermediaries are able  
24 to take more than a third of the total amount paid by advertisers raises legitimate concerns about  
25 whether the intermediation chain is operating efficiently." It added that "competition [in the  
26 digital advertising space] would drive greater innovation and put downward pressure on fees."



1 **VIII. GOOGLE CANNOT JUSTIFY ITS ILLEGAL CONDUCT**

2 209. Google cannot justify its restraints of trade and monopolizing conduct.

3 210. Google cannot supportably claim efficiency justifications for its conduct because  
4 Google's conduct creates numerous inefficiencies.

5 211. Nor is there any valid argument that monopoly power is somehow desirable in the  
6 relevant markets. Even in markets with network effects, antitrust law does not recognize a  
7 defense to anticompetitive conduct based on size. Moreover, as confirmed by relevant empirical  
8 and economic literature, competition between platforms results in better quality, better matches,  
9 and lower net prices. Competition on the merits—in both the Ad Exchange and Ad Network  
10 markets—will produce better outcomes for consumers than monopoly power because competing  
11 Ad Exchanges and Ad Networks will be incentivized to lower their take rates, increasing revenue  
12 to publishers enabling them to generate additional, higher-quality content.

13 212. Nor can Google claim any of the abstract justifications often used when firms  
14 “vertically integrate.” Google's integration in fact reflects a strategy through which Google raises  
15 barriers to entry and prevents new competitors or ways of doing business from breaking into the  
16 online advertising marketplace.

17 **IX. CALIFORNIA LAW APPLIES TO THE ENTIRE CLASS**

18 213. California's substantive laws apply to every member of the Classes, regardless of  
19 where in the United States the Class member resides. Defendants' Terms of Service explicitly  
20 state that California law will govern all disputes arising out of or relating to the terms, service-  
21 specific additional terms, or any related services, regardless of conflict of laws rules. By choosing  
22 California law for the resolution of disputes covered by its Terms of Service, Google concedes  
23 that it is appropriate for this Court to apply California law to the instant dispute.

24 214. Further, California's substantive laws may be constitutionally applied to the claims  
25 of Plaintiffs and the Classes under the Due Process Clause, *see* U.S. CONST. amend. XIV, § 1,  
26 and the Full Faith and Credit Clause, *see* U.S. CONST. art. IV, § 1, of the U.S. Constitution.  
27 California has significant contact, or significant aggregation of contacts, with the claims asserted  
28 by the Plaintiffs and all Class members, thereby creating state interests that ensure that the choice

of California state law is not arbitrary or unfair. Defendants' decision to reside in California and avail itself of California's laws, and to engage in the challenged conduct from and emanating out of California, renders the application of California law to the claims herein constitutionally permissible. The application of California laws to the Classes is also appropriate under California's choice of law rules because California has significant contacts with the claims of Plaintiffs and the proposed Classes, and California has the greatest interest in applying its laws here.

## **CLAIMS FOR RELIEF**

### **COUNT I**

#### **Violation of § 2 of the Sherman Act, 15 U.S.C. § 2**

#### **(Monopolization and Monopoly Maintenance)**

215. Plaintiffs repeat and incorporate by reference each of the foregoing allegations of this Complaint.

216. The relevant markets defined above are valid antitrust markets.

217. Google has willfully maintained and/or enhanced monopoly power in the publisher Ad Server, Ad Network, and Ad Exchange markets.

218. Google possesses monopoly power in the publisher Ad Server, Ad Network, and Ad Exchange markets. Google willfully seeks to maintain and enhance its monopoly power through anticompetitive conduct.

219. There are no procompetitive benefits or justifications that offset the competitive harm of Google's unlawful conduct.

220. As a result of Google's unlawful conduct as alleged herein, Plaintiffs and members of the Classes have suffered, and continue to suffer, monetary harm in an amount to be proved at trial.

**COUNT II**

**Violation of § 2 of the Sherman Act, 15 U.S.C. § 2**

**(Attempted Monopolization)**

221. Plaintiffs repeat and incorporate by reference each of the foregoing allegations of this Complaint.

222. The relevant markets defined above are valid antitrust markets.

223. Should Google be found to lack the power necessary for monopolization liability in any of the relevant markets or for any relevant time period, Plaintiffs assert in the alternative as to such markets and/or time periods as follows:

224. Google has intentionally and unlawfully attempted to monopolize the Ad Network, Ad Exchange, and/or publisher Ad Server markets through anticompetitive conduct, including, *inter alia*, its implicit and explicit taxes on rival Ad Exchanges and its blocking of bids from rival Ad Networks; its interference with and manipulation of auctions and header bidding; and by tying and/or anticompetitive *Microsoft*-style bundling both its publisher Ad Server, on the one hand, and its Ad Network and/or Ad Exchange, on the other.

225. Google has acted with the specific intent to monopolize the Ad Network, Ad Exchange markets, and/or publisher Ad Server markets.

226. Google has a dangerous probability of monopolizing the Ad Server and/or Ad Network and/or the Ad Exchange markets by excluding competitors, undermining quality, squelching innovation, and raising the total price of services.

227. There is no legitimate business justification for Google's conduct.

228. As a result of Google's unlawful conduct, Plaintiffs have suffered, and continue to suffer, monetary harm in an amount to be proved at trial.

**COUNT III**

**Violation of California's Unfair Competition Law**

**(Cal. Bus. & Prof. Code § 17000 *et seq.*)**

229. Plaintiffs repeat and incorporate by reference each of the foregoing allegations of this Complaint.

230. Google's conduct constitutes deceptive, fraudulent, unlawful and/or unfair business acts and practices.

231. Google's conduct threatens an incipient violation of the antitrust laws alleged herein, and it violates the policy and spirit of those laws because the effects of the conduct are comparable to or the same as a violation of the law, and it otherwise significantly threatens and harms competition.

232. Additionally, Google's conduct on balance harms consumers and competition, offends established public policy, is substantially injurious to consumers, and is neither outweighed by countervailing benefits nor avoidable by consumers.

233. Plaintiffs and members of the Classes have been deprived of money or property as a result of Google's unfair business practices alleged herein through numerous mechanisms, including, but not limited to Google's artificially suppression of publishers' advertising revenue through (a) artificially inflated fees, and (b) artificially reduced prices for ad space.

#### **REQUEST FOR RELIEF**

234. WHEREFORE, Plaintiffs and the Class members request the Court to enter judgment in their favor against Defendants, awarding all such relief as the Court deems appropriate and just.

235. Plaintiffs request the following relief:

A. That the Court determine that this action may be maintained as a class action under Rule 23(a), (b)(1), (b)(2), and (b)(3) of the Federal Rules of Civil Procedure, and direct that notice of this action, as provided by Rule 23(c)(2) of the Federal Rules of Civil Procedure, be given to Class members;

B. That the Court enter an order declaring that Defendants' actions, as alleged herein, violate the law;

C. That the Court award Plaintiffs and Class members damages, treble damages, punitive damages, and/or restitution in an amount to be determined at trial;

D. That the Court order Defendants to fully divest their publisher Ad Server line of business, and refrain from operating within the market for publisher Ad Server products;

E. That the Court permanently enjoin Defendants, their affiliates, successors, transferees, assignees, and other officers, directors, agents, and employees thereof from continuing, maintaining, or renewing the conduct alleged herein, and from adopting or following any practice, plan, program, or device having a similar purpose or effect;

F. That the Court award Plaintiffs pre- and post-judgment interest;

G. That the Court award Plaintiffs their costs of suit, including reasonable attorneys' fees and expenses; and

H. That the Court award any and all such other relief as the Court may deem proper.

**JURY TRIAL DEMAND**

236. Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs demand a jury trial of all issues so triable.

Dated: April 5, 2021

Respectfully submitted,

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**FILER'S ATTESTATION**

Pursuant to Civil L.R. 5-1(i)(3), regarding signatures, I, Philip C. Korologos attest that concurrence in the filing of:

**CONSOLIDATED CLASS ACTION COMPLAINT**

has been obtained from each of the other signatories.

Dated: April 5, 2021

/s/ Philip C. Korologos

Philip C. Korologos